# Senior 4 Consumer Mathematics (40S)
# Standards Test

# Administration Manual for Supervising Teachers

## Semester 1
## 2002–2003

Manitoba
Education,
Training
and Youth

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## Preface

This *Administration Manual for Supervising Teachers* is distributed to teachers and administrators, and must be read prior to administering the standards test. The rules and guidelines in this manual must be strictly observed to ensure the consistency of standards test administration.

Please use this manual in conjunction with the registration package, the *Policies and Procedures for Standards Tests* handbook and the *Information Bulletin* to gain a full understanding of the protocols and procedures associated with this test. This manual contains general information about the test, step-by-step instructions for the test administration, and policies regarding absenteeism, lateness, violation of rules, etc.

If you encounter exceptional circumstances not addressed in this manual, or if you have further inquiries, contact Lorna Martin, Assessment Consultant, at 945-8075, or toll-free at 1 800 282-8069, extension 8075.

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# General Information

Manitoba Education, Training and Youth develops all standards tests in collaboration with teachers from across the province. This standards test is based on the student learning outcomes and standards found in the *Senior 4 Mathematics: Manitoba Curriculum Framework of Outcomes and Draft Senior 4 Standards* (2000) document.

The standards test is locally marked and counts for 30% of each student's final grade in the course. Marking instructions are provided by the department immediately following test administration. Student results on the test are released to students according to local policy on the date designated by local jurisdictions.

All students enrolled in Senior 4 Consumer Mathematics (40S), except those who have been exempted, must write all three components of the standards test during the scheduled dates and times. Non-semestered schools or schools only offering Senior 4 Consumer Mathematics (40S) in semester 2, please note that all students repeating a Senior 4 mathematics course must write the standards test, even those who may have previously passed a provincial examination or standards test. **Students enrolled in Senior 4 Consumer Mathematics (45A) and (45B) are not eligible to write the standards test.**

All schools should receive the test materials for each part of the test prior to the test administration date. Principals of public schools receive test materials from their division offices. Principals of independent and band-operated schools receive test materials directly from the Assessment and Evaluation Branch.

The number of test booklets sent to each school is based on the registration information provided by the school at the beginning of each semester. Please advise Lorna Martin, Assessment Consultant, at 945-8075, or toll-free at 1 800 282-8069, extension 8075, immediately if the number of students registered to write the test has increased since registration.

In the context of marking standards tests at the local level, Manitoba Education, Training and Youth:

- trains representatives from local jurisdictions to act as local marking co-ordinators;
- collects and scans all marker sheets from jurisdictions to provide them with test result summaries; and
- supports provincially-funded local jurisdictions by providing $10.00 for each locally-marked test administered in accordance with the test schedule on page 2.

## Features of the test

All students seeking credit in Senior 4 Consumer Mathematics (40S) this semester must write all three components of the standards test during the scheduled dates and times.

The Senior 4 Consumer Mathematics (40S) Standards Test consists of a Portfolio and Project both valued at 30% each, and a Written Test valued at 40% of the total standards test. Overall, the standards test accounts for 30% of each student's final mark.

English or French versions of the test are available for students enrolled in Senior 4 Consumer Mathematics (40S) or "Mathématiques du consommateur de secondaire 4 (40S)". The test is administered and locally scored and includes an optional Portfolio interview.

The provincial standards test is based on the student learning outcomes and standards found in the *Senior 4 Mathematics: Manitoba Curriculum Framework of Outcomes and Draft Senior 4 Standards* (2000) document, and is consistent with the test specifications outlined in the *Information Bulletin*. A copy of the *Information Bulletin* is conveniently posted on the Manitoba Education, Training and Youth website at http://www.edu.gov.mb.ca/ks4/assess/publications.html.

Please note that a *Demographic Data Form* must be completed by each student at the time of the Portfolio component (see sample Appendix II, p. 30).

## Test schedule

The following table summarizes the schedule for the Senior 4 Consumer Mathematics (40S) Standards Test:

| Date | Component | Preparation Time | Time Required for Administration |
|---|---|---|---|
| Between December 2 and 13, 2002 | Project | 10 minutes preparation and instructions | three 60-minute sessions |
| Completed prior to January 15, 2003 (recommendation) | Portfolio | as needed | as needed |
| Between 8:30 a.m. and 12:30 p.m. morning of January 20, 2003 | Written Test | 15 minutes preparation and instructions | 90 minutes |

## Shipping Schedule

The three parts of the Senior 4 Consumer Mathematics (40S) Standards Test will arrive at schools/school divisions in separate shipments each semester. The following table summarizes the shipping schedule for Semester 1.

| Semester 1 | To: Schools/School Divisions |
|---|---|
| October 15 | **Shipment #1: Early Semester**<br>Administration Manual<br>Portfolio Materials<br>Portfolio Scoring Rubric and Scoring Recommendations<br>*Portfolio Scoring Sheets*<br>*Demographic Data Forms*<br>*Attendance Forms* |
| November 25 | **Shipment #2: Mid-Semester**<br>Project Resource Package<br>Project Scoring Rubric and Scoring Recommendations<br>*Project Scoring Sheets*<br>Continued use of Shipment #1 forms |
| December 13 | **Shipment #3: Project Completion Date**<br>Project Marking Guide |
| January 16 | **Shipment #4: Late Semester**<br>*Written Test Resource Package*<br>*Written Test Student Booklets*<br>Completion of Shipment #1 forms |
| January 20 | **Shipment #5: Test Date**<br>*Written Test Marking Guide* |

| Semester 1 | To: Manitoba Education, Training and Youth |
|---|---|
| January 31 | **One Shipment: End of Semester**<br>Student Results:<br>*Portfolio Scoring Sheets*<br>*Project Scoring Sheets*<br>*Written Test Scoring Sheets*<br><br>Administrative Information:<br>*Attendance Forms*<br>*Demographic Data Forms*<br>*Student Registration Update Forms*<br>*Supervising Teacher Feedback Form*<br>*Supervising Teacher Report* |

# Policies for Standards Tests

Principals and supervising teachers should be aware that the *Policies and Procedures for Standards Tests* handbook has been distributed to all schools and is available on-line at http://www.edu.gov.mb.ca/ks4/access/publications.html. This handbook outlines current policies and procedures related to the administration of standards tests and reflects the principles and guidelines contained in *Principles for Fair Student Assessment Practices for Education in Canada* (1993).

## Adaptations

Schools are asked to identify and submit requests for test adaptations **at the time of student registration**. These requests should be submitted on the *Request for Adaptations Form* included with the registration package. Following departmental review of the adaptation requests received, schools will be advised of the department's decision regarding these requests (see *Policies and Procedures for Standards Tests* handbook, Sections 4.0, 4.1 and 4.2).

## Exemptions

Decisions for student exemptions that fall within the guidelines set out in the *Policies and Procedures for Standards Tests* handbook, (Sections 5.0, 5.1 and 5.2) are made at the school level and do not require departmental approval. Schools are required, however, to report school-based exemptions on the *Student Exemption Report* included with the registration package. If additional student exemptions are needed after the registration deadline date, an additional *Student Exemption Report* should be submitted as soon as possible.

For exemptions that fall outside the parameters of the policy and procedure guidelines, requests are to be made **at the time of student registration**. Please submit requests in writing to Ernest Molgat, Director, Assessment and Evaluation Branch, 71–1567 Dublin Avenue, Winnipeg MB R3E 3J5.

## Re-read provisions

As the reporting of individual student scores on locally-marked standards tests is the responsibility of each local jurisdiction, the re-read policy for these tests is determined locally.

## Return of tests to students

Local jurisdictions decide whether to keep the test booklets or return them to students.

## Test confidentiality

Test materials must be kept secure and sealed until administration.

*Written Test Student Booklets* and *Project Resource Packages* must not be reproduced nor information from them be communicated in any way until test administration is completed.

### Portfolio component

The Portfolio Package may be opened by teachers at any time. Teachers are required to photocopy sufficient quantities of the *Student Organizer Sheet* and Explanation Sheets for the number of registered students. All Portfolio Folders, scoring sheets, *Demographic Data Forms* and *Attendance Forms* must be accounted for and returned to a secure location in the school between test sessions.

### Project component

*Project Resource Packages* are to be kept secure until the morning of December 2, 2002, at which time the sealed packages may be opened by teachers. All resource packages (**used or unused**) must be accounted for and returned to a secure location in the school between test sessions.

### Written Test

Bundles of the *Written Test Student Booklets* and the *Written Test Resource Packages* are to be kept secure until the morning of January 20, 2003, at which time the sealed test bundles may be opened by teachers. All **used** test booklets must be accounted for and packaged for local marking.

## Student materials

### Portfolio component

Students should be instructed to work on their portfolios over time. It is recommended that extra copies of the Explanation Sheets be available to students.

The Portfolio Folders (with pre-printed booklet numbers) should be kept in a secure location in the school until students are ready to insert their Explanation Sheets with work samples and submit the Portfolio for marking.

### Project component

Although the *Project Resource Package* contains sufficient research materials for students to complete the Project component, students may use any available resources and may research their Project between work periods. All *Project Resource Packages* must remain in a secure location in the school at all times.

At the end of session 3, students submit their handwritten, typed or printed Project reports together with their *Project Resource Packages*. Student names should not appear on submitted materials. *Project Resource Packages* should be retained by the teacher until final marks have been released.

### Written Test

Students should be instructed to have an HB lead pencil, an eraser, a ruler and a calculator to complete the Written Test.

Students should be cautioned that calculators may not be shared during the Written Test and calculator batteries should be checked before the test begins.

The supervising teacher should have extra pencils, erasers, rulers and calculators to provide to students, should the need arise. Ensure that a pencil sharpener is available in the test room.

Students must **not** bring dictionaries, graphing calculators, notes or textbooks into the test room during the Written Test. Please note that this also applies to ESL students writing the test.

## Students leaving the room

Students are expected to remain in the room for a minimum of 45 minutes for the Written Test.

However, any student who must temporarily leave and re-enter the room should be accompanied by a replacement supervisor. This practice ensures that the supervising teacher can remain in the test room with the students at all times.

## Late arrivals

To avoid the opportunity for students to relay information during the Written Test, students may not enter the test room after the first 15 minutes of the Written Test administration.

## Student absences

### Portfolio component

#### Interview approach

Students absent for their Portfolio interview may be permitted a re-scheduled interview at the discretion of the classroom teacher.

#### Contents approach

Students who do not submit a Portfolio on the due date stipulated by the classroom teacher may submit at a later date at the discretion of their teacher.

### Project component

Students absent for any of the three sessions of the Project component of the standards test may be permitted a make-up session at the discretion of the classroom teacher. Make-up sessions must be administered using the same rules and procedures as regular test sessions.

### Written Test

The Written Test **cannot** be administered at a later date.

Students who are absent on the day of the Written Test are governed by school or school division policy concerning student absences during final tests. The final mark for these students must be identified as a school-based assessment and evaluation practice only.

For the purpose of determining whether the requirement for a mandatory standards test has been met for graduation, completing 70% of the test (the Written Test plus one other component) will be deemed sufficient.

## Responding to student questions

Avoid making any directing/guiding comments during the Written Test, other than those required for distribution of materials and instructions to students.

No explanations, translations, rephrasing, clarifying statements or comments of a similar nature may be provided about the test content.

If a student asks a question related to the Written Test content, a suggested response is, "I'm sorry. I can't answer your question. Do your best with it."

Suspected errors in printing or wording in the Written Test should not be communicated to students unless specific instructions are received from the Assessment and Evaluation Branch.

## Student transfers from one school to another

### Transfers in

When a student transfers into the school after completing the Portfolio component in another school, the receiving supervising teacher records the new student on the *Student Registration Update Form*. The student completes a new *Demographic Data Form*. The receiving school should request the **original** *Portfolio Scoring* (scan) *Sheet* from the previous school.

The receiving school will need the *Portfolio Scoring* (scan) *Sheet* to calculate a total mark for the Senior 4 Consumer Mathematics (40S) Standards Test.

The Assessment and Evaluation Branch will combine the scores for the student from both schools to create a report for the school in which the student is currently registered.

Department funding of $10.00 for each locally-marked test will be based on where the student completed the Written Test.

### Transfers out

When a student transfers out of the school after completing the Portfolio component, record the student's name on the *Student Registration Update Form*.

Provide the receiving school with the **original** *Portfolio Scoring* (scan) *Sheet*. The receiving school will need the score on the Portfolio component to calculate a total mark for the Senior 4 Consumer Mathematics (40S) Standards Test.

## Violation of rules

The *Written Test Rules* are read aloud to students by the supervising teacher immediately before the Written Test (see Appendix I, p. 29).

Document any violation of rules on the *Supervising Teacher Report*. This documentation should include:

- the test booklet number; and
- a description of the circumstances, including available evidence.

The student may be permitted to complete the test.

The consequences of any violation of rules are a local decision.

## Defective materials

Students should be assured that they will not be penalized for any obvious error in printing or wording. Local marking co-ordinators will be advised of any known errors before the marking session. Return the unused damaged booklet(s) with the reports and forms being sent to the department after the marking session.

### On the Written Test administration date

If a damaged or imperfectly printed Written Test booklet is discovered **at the start** of the test session:

- replace the defective test booklet with a new test booklet; and
- print "DAMAGED" on the test booklet cover and on the *Attendance Form*.

### During Written Test administration

If a damaged or imperfectly printed test booklet is discovered **during** the writing of the test:

- give the student a new test booklet (the student keeps the damaged test booklet until the end of the session);

- instruct the student to continue responding to test items in the new test booklet;
- collect both test booklets at the end of the test session and ensure both booklets are kept together by bundling with an elastic band;
- cross out the existing booklet number on the undamaged test booklet and change it to the original booklet number so that **all student responses are recorded under the original booklet number**;
- indicate on the *Attendance Form* that two booklets have been used for one student (see Appendix III, p. 31); and
- record the defective test booklet number on the *Supervising Teacher Report*.

## Responsibilities of School Principals

It is the responsibility of principals to ensure that all components of the standards test are kept confidential until the test administration is completed.

Other responsibilities are listed below.

If test packages are not in the school on schedule:

- public school principals should contact their superintendent;
- principals of independent and band-operated schools should contact Lorna Martin, Assessment Consultant, at 945-8075, or toll-free at 1 800 282-8069, extension 8075.

Use the *Packing Lists* to confirm that all materials have been received. Count the shrink-wrapped test booklets and resource packages to ensure that there are enough booklets for the number of students writing the test.

If additional test materials are needed, immediately contact Lorna Martin, Assessment Consultant at the previously mentioned number.

Store all test materials in a secure area in the school.

Provide supervising teachers with a listing of the Manitoba Education, Training and Youth (MET) numbers for the students registered to write the test. Call the Professional Certification and Student Records Unit at 1 800 667-2378 to obtain MET numbers for new students.

Make arrangements to meet the requirements of the adaptations approved for students (see Adaptations, p. 4 of this manual and *Policies and Procedures for Standards Tests* handbook, Sections 4.0, 4.1 and 4.2).

Co-ordinate test scheduling and space requirements.

Minimize the frequency of school announcements during the Written Test.

Ensure that a replacement supervisor is available to accompany students who must temporarily leave the room.

Provide the *Project Resource Packages* and the Written Test materials to the supervising teacher on the morning of the designated days.

Complete the *Principal Feedback Form* before the end of the Written Test session.

Advise the Assessment and Evaluation Branch of school closures or suspended school bus transportation services that occur on the test date(s) as a result of unusual or extenuating emergency circumstances or extreme inclement weather conditions. Please contact Lorna Martin, Assessment Consultant, at 945-8075 or toll-free at 1 800 282-8069, extension 8075.

## Responsibilities of Supervising Teachers

Supervising teachers administer the test using the step-by-step procedures outlined in the following three checklists in this manual. There is a separate checklist for each component of the standards test.

# Checklists

## Points to Remember

- Ensure that once a standards test (booklet) number* has been assigned to a student, all materials distributed to that student have the same booklet number.
- Remain in the classroom throughout each part of the standards test and engage in work solely related to the duties of supervising the test.
- A replacement supervisor must be available to assist you.
- Store all documents not in use in a secure area in the school.
- Students may **not** have access to their *Project Resource Packages* between sessions.
- Students may **not** use anything produced outside of class during the Written Test.

* All students receive a standards test (booklet) number during the Portfolio component based on the pre-printed booklet number on their Portfolio Folder. Each student must have the same standards test (booklet) number on all materials pertaining to the three parts of the test.

# Checklist of Procedures (Portfolio)

| (check ✔) | **Advance Preparations** |
|---|---|
| | 1. Ensure that: |
| | • appropriate scheduling and space allocation for the Portfolio component has occurred |
| | • the Portfolio materials have been received |
| | • a list of MET numbers for students registered for the standards test is available |
| | 2. Photocopy sufficient quantities of the *Student Organizer Sheet* and Explanation Sheets for the number of students writing the test: |
| | • *Student Organizer Sheet* (1 per student) |
| | • *Career/Life Project—Explanation Sheet* (1 per student) |
| | • *Personal Income Tax Form—Explanation Sheet* (1 per student) |
| | • *Student Choice—Explanation Sheets* (3 per student) |
| | 3. Notify students in advance of the: |
| | • date and time of the Portfolio component for the interview approach (as applicable) |
| | • date and time of the submission of the Portfolio component for the contents approach (as applicable) |
| | • material(s) needed for the Portfolio |
| | • need for each student to record and retain the standards test (booklet) number assigned to them (located on the *Attendance Forms*).<br>Students must use the assigned number for all three components of the standards test. |
| **(check ✔)** | **Prior to the Portfolio component** |
| | 1. Ensure that your materials are available: |
| | • *Packing List* |
| | • *Portfolio Folders* (1 per student, pre-printed with individual student booklet numbers) |
| | • *Student Organizer Sheet* (1 per student) |
| | • *Career/Life Project—Explanation Sheet* (1 per student) |
| | • *Personal Income Tax Form—Explanation Sheet* (1 per student) |
| | • *Student Choice—Explanation Sheets* (3 per student) |
| | • *Attendance Forms* |
| | • *Portfolio Scoring* (scan) *Sheets* |
| | • *Demographic Data Forms* (in envelope provided for storage) |
| | • *Administration Manual for Supervising Teachers* (this document) |

| (check ✔) | **Beginning the Portfolio component** |
|---|---|
| | 1. Distribute: |
| | • *Portfolio Folder* (1 per student) |
| | • *Student Organizer Sheet* (1 per student) |
| | • *Career/Life Project—Explanation Sheet* (1 per student) |
| | • *Personal Income Tax Form—Explanation Sheet* (1 per student) |
| | • *Student Choice—Explanation Sheets* (3 per student) |
| | • *Demographic Data Form* (1 per student) |
| | 2. Circulate the *Attendance Form* so students can print their names beside their standards test (booklet) number. They will need this number to write on their *Demographic Data Form* and each Portfolio explanation sheet.<br>Note: The *Attendance Form* is the only record connecting students' identities to all three components of the Senior 4 Consumer Mathematics (40S) Standards Test. |
| | 3. Supervise the completion of the *Attendance Form* by ensuring that students print their name beside their standards test (booklet) number. |
| | 4. Read instructions for completing the *Demographic Data Forms* printed on the top left corner of the form. Direct students to print and shade in all information requested on the *Demographic Data Form*. Remind students of the importance of accurately recording the Program Information (English, French Immersion or Français). |
| | 5. Instruct students to write their standards test (booklet) number on each of their Portfolio explanation sheets. (This number is also used for the Project and Written Test.) |
| | 6. Instruct students to ensure that the standards test (booklet) number recorded on their *Demographic Data Form* is accurate **and** the same as the number recorded on the Portfolio explanation sheets. |
| | 7. Collect and stack the *Demographic Data Forms* in numerical order. |
| | 8. Collect and stack the *Portfolio Folders* in numerical order. |
| | 9. Read aloud the *Student Organizer Sheet*. |
| | 10. Remind students: |
| | • which scoring approach you will be using for the Portfolio component (contents or interview) |
| | • they will submit the Portfolio explanation sheets with five work samples prior to January 20, 2003 |
| (check ✔) | **During the Portfolio component** |
| | 1. Students who are present will have signed the *Attendance Form*. Remember to add the name of any student(s) absent at the session for the distribution of the Portfolio materials. |
| | 2. Ensure that each student absent at the session for the distribution of Portfolio materials completes a *Demographic Data Form*. |

| | |
|---|---|
| | 3. Verify that all the information on each *Demographic Data Form* is accurately printed and shaded. Ensure that the section asking for Program Information is accurate and complete. |
| | 4. Place all used *Demographic Data Forms* in numerical order in the labelled envelope provided. Do not use elastic bands, staples or paper clips as these may damage the sheets. Store the forms in a secure location until they are to be forwarded to the Assessment and Evaluation Branch (after the Written Test is completed). |
| (check ✔) | **Ending the Portfolio component** |
| | 1. Distribute the *Portfolio Folders*. Ensure that students have the same booklet number on their folder as recorded on the *Attendance Form*. |
| | 2. As each student submits a Portfolio (contents approach) or completes an interview (interview approach), indicate with a "✔" in the "Portfolio Submitted" column of the *Attendance Form*. If a student does not submit a Portfolio or undergo an interview, leave a blank space for that student under the "Portfolio Submitted" column of the *Attendance Form*. |
| | 3. As students submit the Portfolio (contents approach), ensure that the standards test (booklet) number on each explanation sheet matches the Portfolio Folder number. |
| | 4. Ensure that the number of checkmarks in the "Portfolio Submitted" column matches the number of the Portfolio(s) submitted for the marking (contents approach) or matches the number of interviews completed (interview approach). |
| | 5. Store the Portfolios (contents approach) and the *Portfolio Scoring* (scan) *Sheets* in a secure location until marking begins. |
| (check ✔) | **Marking the Portfolio component** |
| | 1. a) Contents approach<br>Retrieve the Portfolios and the *Portfolio Scoring* (scan) *Sheets* from the secure location. Ensure the standards test (booklet) number on the *Portfolio Folder* matches the *Portfolio Scoring Sheet*. |
| | b) Interview approach<br>Retrieve the *Portfolio Scoring* (scan) *Sheets* from the secure location. Ensure the standards test (booklet) number on the *Portfolio Scoring Sheet* is accurate for the student being interviewed. |
| | 2. Score the Portfolio component using the recommendations in the Portfolio component teacher package. |
| | 3. Record student marks on the *Portfolio Scoring* (scan) *Sheets*. Keep a separate record of each student's results for your file. |
| | 4. Place the *Portfolio Scoring* (scan) *Sheets* in numerical order in the envelope provided. |
| | 5. Store *Portfolio Scoring* (scan) *Sheets* in a secure location until they are shipped to a local marking site, if a centralized model is used. |

| | |
|---|---|
| | 6. Complete the *Student Registration Update Form* for any students who have transferred in or out of the school following the test registration date. Use the *List of Reason Codes to Record Changes in Standards Test Student Registration Number* provided in Appendix IV, p. 32. |
| | 7. The student Portfolios (contents approach) remain with the school. They are **not** to be forwarded to a local marking site nor are they to be forwarded to Assessment and Evaluation Branch. |

Store ALL standards test materials in a secure location. The materials are required for the remaining two parts of the standards test.

# Checklist of Procedures (Project)

| (check ✔) | **Advance Preparations** |
|---|---|
| | 1. Check with your principal to ensure that: |
| | • appropriate scheduling and space allocation for the Project component has occurred |
| | • the Project materials itemized on the *Packing List* have been inventoried |
| | • arrangements have been made to accommodate the adaptations approved for any students |
| | 2. Notify students in advance of the: |
| | • due date for submission of the Project report |
| | • dates and times of the three sessions of the Project component |
| | • materials needed to complete the Project report |
| | 3. If there is more than one teacher supervising the test, photocopy the *Supervising Teacher Report* and the *Supervising Teacher Feedback Form.* |
| **(check ✔)** | **Prior to the Project component** |
| | 1. Ensure that your materials are available: |
| | • *Packing List* |
| | • *Project Resource Packages* |
| | • *Attendance Forms* |
| | • *Demographic Data Forms* (for students who have arrived since the start of the Portfolio component) |
| | • *Student Registration Update Form* |
| | • *Project Scoring* (scan) *Sheets* |
| | • *Supervising Teacher Report* |
| | • *Supervising Teacher Feedback Form* |
| | • *Principal Feedback Form* (this form must be completed prior to the end of the Written Test) |
| | • *Administration Manual for Supervising Teachers* (this document) |
| | 2. Count the *Project Resource Packages*. The number of packages should equal the number requested by the school plus additional packages. The amount should also match the number on the *Packing List*. |
| | • If you need to split a bundle of *Project Resource Packages* between classrooms, make a photocopy of the *Attendance Form*. **On your copy,** cross out the standards test (booklet) numbers that are not used in your classroom and forward these booklets to the supervising teacher who requires them. |
| | 3. Ensure that students exempted from the Senior 4 Consumer Mathematics (40S) Standards Test are not present. |

| (check ✔) | **Session 1** |
|---|---|
| | 1. Distribute the: |
| | • *Project Resource Packages*. Verify that the booklet number corresponds with the student's number on the *Attendance Form*. |
| | 2. Use the *Attendance Form* to complete the section titled "Student Attendance During Project Sessions". Indicate that a student is absent by recording an "A" on the *Attendance Form*. Students absent for any of the three Project sessions may be granted a make-up session at the classroom teacher's discretion (see sample *Attendance Form*, Appendix III, p. 31). |
| | 3. Ensure that any students who have not completed a *Demographic Data Form* do so at this time. |
| | 4. Write the time and date of the next session on the board. |
| | 5. Remind students of the Project report due date. |
| | 6. Begin the Project brainstorming session by reading aloud the first two pages of the *Project Resource Package* ("Welcome To ..."). |
| | 7. Instruct students to individually skim through the *Project Resource Package*. |
| | 8. Allow students to orally share ideas related to the Project. Maintain an orderly discussion. |
| | 9. At the conclusion of the session, collect and stack the *Project Resource Packages* in numerical order. |
| | 10. Return the *Project Resource Packages* to a secure location of the school. |
| (check ✔) | **Session 2** |
| | 1. Use the *Attendance Form* to indicate each student's presence or absence at Session 2. |
| | 2. Ensure that any students who have not completed a *Demographic Data Form* do so at this time. |
| | 3. Distribute the *Project Resource Packages*. Ensure that students have the same booklet as they had for Session 1. |
| | 4. Ensure students work independently. |
| | 5. At the conclusion of the session, collect and stack the *Project Resource Packages* in numerical order. |
| | 6. Place all additional *Demographic Data Forms* in numerical order with those already completed. |
| | 7. Return the *Project Resource Packages* and *Demographic Data Forms* to a secure location of the school. |

| (check ✔) | **Session 3** |
|---|---|
| | 1. Distribute the *Project Resource Packages*. Ensure that students have the same booklet as they had for Session 1 and Session 2. |
| | 2. Ensure that any students who have not completed a *Demographic Data Form* do so at this time. |
| | 3. Ensure students work independently. |
| | 4. As students submit their reports for the Project component of the standards test, ensure that the standards test (booklet) number is clearly indicated and matches the information on the *Attendance Form* and the *Demographic Data Form*. **Each student must have the same standards test (booklet) number on all materials pertaining to the three components of the test.** |
| | 5. Place a "✔" on the *Attendance Forms* in the "Project Submitted" column once students have submitted their Project report. |
| | 6. Stack the students' Project reports in numerical order. |
| | 7. Stack the *Project Resource Packages* in numerical order. |
| | 8. Complete the *Student Registration Update Form* for any students who have transferred in or out of the school following the test registration date. Use the *List of Reason Codes to Record Changes in Standards Test Student Registration Number* provided in Appendix IV, p. 32. |
| | 9. Complete the *Supervising Teacher Report*. Note any unusual circumstances on this report. |
| | 10. Ensure that the number of check marks in the "Project Submitted" column on the *Attendance Form* matches your count of the student Project reports. |
| | 11. Return the Projects (student reports) and *Project Resource Packages* to a secure location in the school. |

Store ALL standards test materials in a secure location. The materials are required for the upcoming Written Test.

# Checklist of Procedures (Written Test)

| (check ✔) | **Advance Preparations** |
|---|---|
| | 1. Check with your principal to ensure that: |
| | • appropriate scheduling and space allocation for the Written Test has occurred |
| | • the Written Test materials itemized on the *Packing List* have been inventoried |
| | • a replacement supervisor is available to accompany students who must temporarily leave the room during the Written Test |
| | • arrangements have been made to accommodate the adaptations approved for students |
| | 2. Ensure that all subject-related materials have been removed from the walls and boards. |
| | 3. Notify students in advance of the: |
| | • time, location and duration of the Written Test |
| | • materials needed to write the Written Test (see p. 6) |
| | • *Written Test Rules* (see Appendix I, p. 29) |
| | • requirement to remain in the Written Test room for at least 45 minutes |
| | 4. Ensure that you have extra supplies and that there is a functioning pencil sharpener and stapler in the room. Students must not exchange materials during the Written Test. |
| | 5. If there is more than one teacher supervising the Written Test, photocopy the *Supervising Teacher Report* and *Supervising Teacher Feedback Form*. |
| | 6. Review the sample forms in Appendices II and III (pages 30 and 31). |
| (check ✔) | **Prior to the Written Test** |
| | 1. Ensure that your materials are available: |
| | • *Packing List* |
| | • *Written Test Student Booklets* |
| | • *Written Test Resource Packages* |
| | • *Attendance Forms* (already initiated during the Portfolio and Project components) |
| | • *Student Registration Update Form* |
| | • *Demographic Data Forms* (in envelope provided for storage) |
| | • extra copies (4) of the *Written Test Resource Package* |
| | • extra copies (4) of the *Written Test Student Booklet* |
| | • *Supervising Teacher Report* |
| | • *Supervising Teacher Feedback Form* |
| | • *Principal Feedback Form* (this form must be given to the principal and collected before returning test materials for marking) |

| | |
|---|---|
| | • *Administration Manual for Supervising Teachers* (this document) |
| | • postage-paid envelope for the return of administrative documents to the Assessment and Evaluation Branch (see p. 23 for details) |
| | 2. Count the *Written Test Student Booklets* and the *Written Test Resource Package* booklets. The number of test booklets should equal the number requested by the school plus four additional booklets. The amount should also match the number on the *Packing List*. |
| | 3. If you need to split a bundle of Written Tests between classrooms, refer to the *Attendance Form*. **On your copy**, cross out the standards test (booklet) numbers that are not used in your classroom and forward these booklets to the supervising teacher who requires them. |
| | 4. Arrange the desks as far apart as possible. |
| | 5. Ensure that students exempted from writing the standards test are not present. |
| (check ✔) | **Beginning the Written Test** |
| | 1. Use the *Attendance Form* to distribute: |
| | • *Written Test Student Booklets* |
| | • *Written Test Resource Packages* |
| | 2. Read aloud to students the *Written Test Rules* (Appendix I, p. 29). Read aloud pages *i–iii* in the *Written Test Student Booklet*. |
| | 3. **Instruct students to turn the page and begin. Record the start time on the *Supervising Teacher Report*.** |
| (check ✔) | **During the Written Test** |
| | 1. Refer to the *Attendance Form* previously used to record students' attendance for the Portfolio and Project components. Use these forms to record a student's presence or absence for the Written Test (see sample *Attendance Form*, Appendix III, p. 31). |
| | 2. **Retain a copy of the *Attendance Form* as this is the school's only record connecting student's identities to their Senior 4 Consumer Mathematics (40S) Standards Test results.** |
| | 3. Ensure that each student has completed a *Demographic Data Form*. |
| | 4. After 45 minutes, advise students that they have 45 minutes remaining. |

| (check ✔) | **Ending the Written Test** |
|---|---|
| | 1. Inform students that the Written Test has ended. Ask them to stop writing. |
| | 2. Collect the *Written Test Student Booklets* and the *Written Test Resource Packages.* |
| | 3. As students submit their test materials, ensure that each *Written Test Student Booklet* number matches the information on the *Attendance Form.* Each student must have the same number for all three components of the standards test. |
| | 4. Place a check "✔" on the *Attendance Form* under the column headed "Written Test Booklet Submitted" as students submit their booklets. |
| | 5. **Record the time students finish writing the test on the *Supervising Teacher Report.* Do not include the extra time given for late arrivals or for students with adaptations.** |
| | 6. Stack the *Written Test Student Booklets* in numerical order. |
| | 7. Complete the *Supervising Teacher Report.* Note any unusual circumstances on this report. |
| | 8. Ensure that the number of check marks in the "Written Test Booklet Submitted" column on the *Attendance Form* matches your count of the *Written Test Student Booklets.* |
| | 9. Complete the *Student Registration Update Form* using the reason codes provided in Appendix IV, p. 32. |
| | 10. Make one or two copies of the *Attendance Form* and *Supervising Teacher Report*(s). One copy of each must be retained by the school and one forwarded to the local marking site, if a centralized model is used. |
| | 11. Collect the *Principal Feedback Form.* |
| | 12. Complete the *Supervising Teacher Feedback Form.* |
| | 13. Return all Written Test materials and feedback forms to the secure area in the school until the commencement of marking in your school or until materials are forwarded to the local marking site. |

Prepare test materials from all three parts of the Senior 4 Consumer Mathematics (40S) Standards Test for shipping according to the instructions on the following pages.

# Submitting Test Materials

Schools may use a variety of marking models for the Senior 4 Consumer Mathematics (40S) Standards Test. The shipping directions for test materials are specific to the marking model used.

## School-based Marking and Centralized Marking (one or more components scored at a central location)

### Before marking

It is essential that the following materials are packaged and forwarded **to the local marking site**, immediately after completion of the Written Test on January 20, 2003:

| (check ✓) | |
|---|---|
| | • all student *Portfolio Scoring* (scan) *Sheets*; |
| | • all student *Project Scoring* (scan) *Sheets*; |
| | • all student *Written Test Scoring* (scan) *Sheets*; |
| | • **all used** *Written Test Student Booklets*; |
| | • copy of the *Attendance Forms*; and |
| | • copy of the *Supervising Teacher Report*. |
| | • original *Attendance Forms*; |
| | • **all used** *Demographic Data Forms*; |
| | • *Student Registration Update Form*; |
| | • *Supervising Teacher Report*; |
| | • *Supervising Teacher Feedback Form*; |
| | • *Principal Feedback Form*; and |
| | • all damaged or misprinted booklets. |

### After marking

When local marking is done at a school or a central location, the Local Marking Co-ordinator is responsible for sending the materials to the Assessment and Evaluation Branch (see shipping instructions, p. 24).

After local marking is completed for all components of the standards test, prepare a package for return to **Assessment and Evaluation** no later than January 31, 2003. Include all materials listed on page 24. Use the set of return labels enclosed.

## Classroom-based Marking (all three components scored by classroom teacher)

When local marking is done at the classroom level, the teacher is responsible for sending the materials to the Assessment and Evaluation Branch (see shipping instructions, p. 24).

After local marking is completed for all components of the standard test, prepare a package for return to the Assessment and Evaluation Branch no later than January 31, 2003. Use the set of return labels enclosed.

The package must include:

| (check ✓) | |
|---|---|
| | • original *Attendance Forms*; |
| | • **all used** *Demographic Data Forms*; |
| | • *Student Registration Update Form*; |
| | • *Supervising Teacher Report*; |
| | • *Supervising Teacher Feedback Form*; |
| | • *Principal Feedback Form*; |
| | • *Portfolio Scoring* (scan) *Sheets*; |
| | • *Project Scoring* (scan) *Sheets*; |
| | • *Written Test Scoring* (scan) *Sheets*; |
| | • *Local Marking Co-ordinator Feedback Form*; and |
| | • all damaged or misprinted booklets. |

## Shipping materials to the department

**Jurisdictions within the City of Winnipeg** send packages directly to the Assessment and Evaluation Branch via Midland Canada (989-5630). The person placing the call should quote **account number E019,** give the jurisdiction name, address, and the name of the contact person.

**Jurisdictions outside the City of Winnipeg** return their package by Xpresspost. It is very important to package all materials in **one box or mailing envelope** whenever possible.

After the package(s) is (are) sealed, affix the return labels supplied.

To utilize the **bill of lading**:

1. Sign the "Sender's Signature" section of the bill of lading at the "X".
2. Take your sealed envelope/package and bill of lading to the post office.
3. The postal clerk will fill in the weight of the envelope/package and prepare the envelope/package for mailing. Ask the postal clerk for the customer receipt and keep it as a record of shipment. If it is necessary to ask Canada Post to trace the envelope/package, your school will be contacted and asked to provide the item number.

We have provided sufficient materials for the return of **one** envelope/package. If you must send a second envelope/package, ask the postal clerk for an additional bar code label to attach to the second envelope/package. Ensure that the bar code number is recorded in the Item ID column. Note that the second envelope/package must be properly addressed to the Assessment and Evaluation Branch.

Return all required sheets and forms on or before January 31, 2003. Payments for local marking will be made according to the number of tests marked, based on the local marking scan sheets received.

# Appendices

# Appendix I: Written Test Rules

## Senior 4 Consumer Mathematics (40S) Standards Test

**The supervising teacher is expected to read these rules aloud to students at the beginning of the Senior 4 Consumer Mathematics (40S) Standards Test—Written Test:**

- Check the title of your *Written Test Resource Package* and *Written Test Student Booklet*. Make certain that the number of your test booklet corresponds with the number that you used for your Portfolio and Project booklets.
- During this test session, do not proceed until instructed to do so.
- If you receive a damaged or imperfectly printed booklet, return it to receive another booklet.
- You will not be permitted to leave the test room until **45 minutes** of test time has elapsed. (You may leave before that time in exceptional circumstances such as illness, when accompanied by a supervisor.)
- At the beginning of the session you should have a *Written Test Student Booklet*, a *Written Test Resource Package*, an HB lead pencil, an eraser, a ruler and a calculator. No other materials are permitted. Test materials and calculators are not to be exchanged.
- You will not give assistance to, nor receive assistance from another student. If you require something during the test, raise your hand and I will come to you.
- Do not ask questions or request explanations with regard to the content of the questions on the test.
- Do **not** identify yourself or your school, teacher or town in your test booklet.
- When I ask you to stop writing put your pencil down immediately.
- You may not discard any materials. The *Written Test Student Booklet* must remain intact. Any extra paper used must be stapled into the test booklet on the appropriate page. You may **not** leave the room with any materials pertaining to the test.

# Appendix II: Sample Generic Demographic Data Form

# Appendix III: Sample Attendance Form

Page _____ of _____

School Number: 9999
School Name
School Address
School City and Postal Code

## ATTENDANCE FORM—SEMESTER 1 2002–2003

### Senior 4 Consumer Mathematics (40S) Standards Test

| Booklet Number | Student Name (Please Print) | *Demographic Data Form* Submitted (check ✔) | Portfolio Submitted (check ✔) | Student Attendance During Project Sessions[1] | | | Project Submitted (check ✔) | Written Test[2] Booklet Submitted (check ✔) |
|---|---|---|---|---|---|---|---|---|
| | | | | S1 | S2 | S3 | | |
| 10001 | SANDRA WONG | ✔ | ✔ | ✔ | ✔ | A | ✔ | |
| 10002 | KEVIN MELNYCHUK | ✔ | ✔ | ✔ | A | A | | ✔ |
| 10003 | DAMAGED | | | | | | | |
| 10004 | DALLAS SEVERN | ✔ | ✔ | ✔ | ✔ | A | ✔ | ✔ |
| 10005 | MANUEL SOUSA | ✔ | | ✔ | $A^M$ | ✔ | ✔ | ✔ |
| 10006 | ROBERT SMITH | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 10007 | UNUSED | | | | | | | |
| ~~10008~~ | Used with 10004 (damaged) | | | | | | | |
| ~~10009~~ | Used in another classroom | | | | | | | |
| ~~10010~~ | Used in another classroom | | | | | | | |

1 ***For each Project session, record a "✔" for Present. An "A" indicates a student is Absent. "$A^M$" indicates student absence and make-up session held later.*** Make-up sessions may be conducted at the classroom teacher's discretion **for the Project component only**.

2 ***There are no make-up sessions for the Written Test.***

Karen Booth

**Supervising Teacher's Name** *(please print)*

**Please ensure that copies of this form are retained for your records. You will need this form to link your locally marked test with a student's name.**

# Appendix IV: List of Reason Codes to Record Changes in Standards Test Student Registration Numbers

(Please use these codes to complete the *Student Registration Update Form* when returning to the Assessment and Evaluation Branch in JANUARY 2003.)

| Absent | |
|---|---|
| 01 | arrived too late to write the test |
| 02 | did not write due to weather |
| 03 | family/personal reasons |
| 04 | medical/illness/accident |
| 05 | out-of-town activity (athletic/academic) |
| 06 | religious objections |
| 07 | student refused to write |
| 08 | unexcused |
| 09 | working |
| 19 | other (please specify) |

| Withdrawn | |
|---|---|
| 22 | dropped course |
| 23 | incarcerated/court |
| 24 | medical/illness/accident |
| 25 | family/personal reasons |
| 26 | poor attendance/progress |
| 27 | quit school |
| 29 | other (please specify) |

| Incomplete | |
|---|---|
| 40 | continuing course/program next semester |
| 41 | no work completed |
| 49 | other (please specify) |

| Errors in Registration | |
|---|---|
| 20 | changed program |
| 21 | deceased |
| 50 | already has credit |
| 51 | auditing the course |
| 52 | exchange student |
| 53 | registered twice |
| 54 | quarter system projected registration |
| 55 | registered in wrong grade |
| 59 | other (please specify) |

| Exemptions | |
|---|---|
| 60 | emotional/psychological condition or circumstances |
| 61 | "M" credit designation |
| 62 | "E" credit designation |
| 63 | "phase d'accueil—bloc intensif" designation |
| 69 | other (please specify) |

| Drop Ins | |
|---|---|
| 70 | forgotten on original test registration |
| 71 | late registration to course |
| 72 | transferred in from another school/province/country |
| 79 | other (please specify) |

| Migrancy | |
|---|---|
| 90 | transferred to another school within the province |
| 91 | transferred to another school outside of the province |
| 99 | other (please specify) |

# Senior 4 Consumer Mathematics (40S)
# Standards Test

# Portfolio
## Guide for Teachers

## 2003

Manitoba
Education
and Youth

## This package contains:

- Introductory Information
- *Student Organizer Sheet*
- Student explanation sheets with Portfolio questions
- Recommended Portfolio Scoring Strategy
- *Portfolio Scoring Rubric*
- Copy of the *Portfolio Recording Sheet*

## Introductory Information

The Portfolio component of the Senior 4 Consumer Mathematics (40S) Standards Test has a classroom-based administration and may be scored using either a contents approach or an interview approach at the discretion of the classroom teacher.

The questions for the Portfolio component are designed to function as both writing prompts (contents approach) and interview prompts (interview approach).

Teachers are encouraged to have students complete preparatory work on the explanation sheets towards the end of the course and to begin the Portfolio component process prior to the two-week assessment period to allow sufficient time for interviewing and/or marking.

### Recommendations for Preparing Students for the Portfolio component

1. Inform students whether they will be submitting their portfolios for marking (contents approach) or whether they will be bringing their portfolios to a 20-minute interview (interview approach).

2. Share the scoring rubric with students. The more information they have on the method of evaluation, the more prepared they will be to meet the expectations.

3. Remind students to use the *Student Organizer Sheet* to assist them in selecting work samples that illustrate different skills as well as different units of study. For example, selecting three tests from three different units will not score as well as three different types of consumer mathematics activities from three different units. Selecting a variety of work samples will also help eliminate repetitious explanations.

4. Inform students that their explanation sheets are the method by which they will be evaluated if the contents approach is being used. If the interview approach is being used, the explanation sheets provide pointers for discussion during the interview.

5. Explain to students that each explanation sheet has two major questions followed by sub-questions. These questions are designed as focal points for their written response (contents approach). In the interview approach, these are the verbal prompts that the interviewer uses to elicit a response from them about each portfolio selection.

6. Make students aware that for reasons of fair assessment, interviewers will not stray from the prompts provided on the explanation sheets. Similarly, when using the contents approach, teachers will not proofread or make suggestions about written responses prior to submission.

## Recommendations for Administering the Portfolio component

1. Introduce the practice of maintaining a portfolio early in the year. Inform students that part of their assessment will be based on their portfolio.

2. Create a system for organizing and storing portfolios. Some teachers have had students use storage containers such as pizza boxes, file folders or accordion files.

3. Form your decision to interview students or mark their submitted portfolios early in the semester/year. Inform the students of your plan.

4. Plan sufficient time and reserve a quiet place for interviewing/marking the Portfolio component. All marks must be recorded by January 20, 2002.

5. **Photocopy sufficient quantities** of the *Student Organizer Sheet* and student explanation sheets. Distribute the sheets to students to allow sufficient time for them to make good choices in their sample selections and to construct thorough responses.

6. If interviewing, relax the student by describing the process. Let the student know in advance that you will be jotting down notes as the interview proceeds to help you recall the details.

7. Keep the recording sheets secure location with demographic forms and the *Attendance Form*. The *Attendance Form* is required during the remaining two parts of the standards test.

## Recommendations for Scoring the Portfolio component

This package contains sufficient numbers of scan sheets (based on the number of students registered for your course) for recording portfolio scores. Keep a record of each student's results. A recording sheet template is provided to assist you.

Specific directions for scoring the portfolios are listed on page 11.

# Student Organizer Sheet

## Senior 4 Consumer Mathematics (40S) Standards Test: Portfolio

**Please include the following five (5) work samples and their accompanying explanation sheet:**

☑ **Career/Life Project**
- *Portfolio Sample: Career/Life Project Explanation Sheet*

☑ **Personal Income Tax Form**
- *Portfolio Sample: Personal Income Tax Form Explanation Sheet*

☑☑☑ **Three (3) work samples of your choice**
- Samples from three (3) different units demonstrating a variety of skills and strategies (see list of types of samples for suggestions)
- *Portfolio Sample: Student Choice Explanation Sheet* (one for each sample)

**Unit of Study:**

- ❑ Problem Analysis
- ❑ Design and Measurement
- ❑ Investigative Project
- ❑ Analysis of Games and Numbers
- ❑ Government Finances
- ❑ Investments
- ❑ Personal Finance
- ❑ Statistics
- ❑ Variation and Formulas

**Types of Work Samples (suggestions):**

- ❑ Budget
- ❑ Daily Assignment
- ❑ Journal Entry
- ❑ Scaled Drawing
- ❑ Unit Summary
- ❑ Case Study
- ❑ Discussion Notes
- ❑ Project
- ❑ Technology/Spreadsheet/CAD
- ❑ Other (specify) _____
- ❑ Chart/Graph/Diagram
- ❑ Game/Puzzle
- ❑ Research
- ❑ Test/Quiz

Booklet No.:

# Portfolio Sample: Career/Life Project Explanation Sheet

## PART A: THE CONSUMER MATHEMATICS CONNECTION

**Describe your Career/Life Project.**

- How did you choose the career?
- How did you research the project?
- What math-related skills did you use?
- How does this project connect to Consumer Mathematics?

## PART B: THE REAL WORLD CONNECTION

**Explain how this project might help you plan for your future.**

- What did you learn about your personal skills and interests by doing this project?
- How does this project connect to everyday life?

Booklet No.:

# Portfolio Sample:
# Personal Income Tax Form Explanation Sheet

## PART A: THE CONSUMER MATHEMATICS CONNECTION

**Describe your sample Personal Income Tax Form.**

- What math-related skills did you use to complete the Personal Income Tax Form?
- What information did you need to complete the Personal Income Tax Form?
- How does the Personal Income Tax Form relate to other units in Consumer Mathematics?

## PART B: THE REAL WORLD CONNECTION

**Explain the use of Personal Income Tax Forms.**

- How does Personal Income Tax Form preparation connect to everyday life?
- Why are Personal Income Tax Forms required for both Manitoba and Canada?

Booklet No.:

# Portfolio Sample: Student Choice Explanation Sheet

## Summary

**Unit:**

- ❑ Problem Analysis
- ❑ Design and Measurement
- ❑ Investigative Project
- ❑ Analysis of Games and Numbers
- ❑ Government Finances
- ❑ Investments
- ❑ Personal Finance
- ❑ Statistics
- ❑ Variation and Formulas

**Types of Sample:**

- ❑ Budget
- ❑ Daily Assignment
- ❑ Journal Entry
- ❑ Scaled Drawing
- ❑ Unit Summary
- ❑ Case Study
- ❑ Discussion Notes
- ❑ Project
- ❑ Technology/Spreadsheet/CAD
- ❑ Other (specify) _____
- ❑ Chart/Graph/Diagram
- ❑ Game/Puzzle
- ❑ Research
- ❑ Test/Quiz

## PART A: THE CONSUMER MATHEMATICS CONNECTION

**Describe your sample.**

- Why is this sample important to include in your portfolio?
- What processes were involved in completing this sample?
- What math-related skills did you use?
- How does this sample connect to Consumer Mathematics?

## PART B: THE REAL WORLD CONNECTION

**Explain how this sample connects to everyday life.**

- What did you learn about your personal skills and interests?
- What types of activities or workplaces use this kind of information?

## Recommended Portfolio Scoring Strategy

*Students are scored on 2 dimensions:* format and reflection—using a pre-established scoring rubric (see next page) whether an interview approach is being used or a contents approach is being used.

### Dimension 1—Format

*THE MARKER HOLISTICALLY SCANS THE PORTFOLIO*

This scoring dimension focuses on overall impression, neatness and completeness. The marker is answering the question, "Generally, are the portfolio samples varied, legible, carefully arranged?" The following marking strategy is recommended:

- Scan the student's portfolio for a general sense of how the student has selected samples and arranged them.
- Read the descriptors under Level 2 (which are identical to the outcomes) and decide if they are appropriate. If not, read the descriptors of the level above or below.
- If only some of the descriptors in a particular level of performance fit, determine the degree to which the student is approaching the next or previous level and whether the "approaching level" is a more appropriate description of the portfolio.

### Dimension 2—Reflection

*THE MARKER HOLISTICALLY CONSIDERS EACH STUDENT SAMPLE*

Dimension 2 focuses on each sample in the student's portfolio collection. The marker is answering the question, "For each sample, has the student linked the content of the explanation sheet to the work sample in terms of real world connections and consumer mathematics skills and strategies?"

The marker is searching for evidence of mathematical analysis and synthesis as it relates to the real world and other units of study. The following marking strategy is recommended:

- Read each student's explanation sheet for evidence of specific reflections related to each portfolio sample. [If using the interview approach, ask the student to respond orally to each prompt.]
- Form a judgement on the logic of reasoning in terms of each sample provided, the mathematical connections and the connections to the real world. [If using the interview approach, form a judgement based on the logic provided orally by the student.]

The "no mark" category is restricted to those portfolios that are not legible, not submitted or do not fit the descriptors on the rubric.

| CONSUMER 40S PORTFOLIO SCORING RUBRIC | | Level 1 Portfolio | Level 2 Portfolio | Level 3 Portfolio |
|---|---|---|---|---|
| Format | **Context** | **Incomplete Portfolio:** *Unclear, inconsistent or incomplete portfolio* | **Complete Portfolio:** *Relatively clear and complete portfolio* | **Clear, Complete Portfolio:** *Clear, coherent, and complete portfolio* |
| | • Overall Impression | • Disorganized; some parts are legible | • Organized; all parts are legible | • Organized; all parts are easy to read |
| | • Selection (variety) | • Limited selection of samples; some samples are missing or incomplete | • Complete selection of samples; all samples are complete and relevant | • Complete and varied selection of samples; all samples are complete and relevant |
| Reflection | **Collection: Analysis/Synthesis** | **Limited Reflections:** *Reflections on explanation sheets are sketchy or not present* | **Routine Reflections:** *Reflections on explanation sheets are limited and/or similar* | **Thorough/Insightful Reflections:** *Insightful reflections on explanation sheets* |
| | • Mathematical Connection (question 1) | • Errors in reasoning; ideas are sometimes unrelated to mathematical concepts | • Logical reasoning; ideas are related to mathematical concepts | • Insightful reasoning; ideas combine mathematical concepts |
| | | • Explanation relates loosely to portfolio work sample | • Explanation relates to portfolio work sample | • Explanation is linked directly to portfolio work sample |
| | • Real World Connection (question 2) | • No attempt to connect across concepts or everyday life | • Connects mathematical concepts to everyday life where applicable | • Makes multiple connections between mathematical concepts and everyday life where applicable |

| Performance Level: | Level 1 | Approaching Level 2 | Level 2 | Approaching Level 3 | Level 3 |
|---|---|---|---|---|---|

*REVISED 2002

Manitoba Education, Training and Youth

PLEASE DO NOT WRITE IN THIS AREA

[SERIAL]

Senior 4 Consumer Mathematics (40S) Standards Test—2003

# Portfolio Scoring Sheet

**INSTRUCTIONS**

- Use an HB pencil only.
- Do not use ballpoint or felt tip pens.
- Do not mark other areas on this form.
- Shade the appropriate circle.
- Erase cleanly any marks you wish to change.

CORRECT: ● INCORRECT: ⊘ ⊠ ◒ ◔

○ INTERVIEW APPROACH

○ CONTENTS APPROACH

| | | No mark | Level 1 | Approaching Level 2 | Level 2 | Approaching Level 3 | Level 3 | |
|---|---|---|---|---|---|---|---|---|
| Format | **Context**<br>• Overall Impression<br>• Selection | ⓪ | ① | ② | ③ | ④ | ⑤ | 101 |
| (25) | SUBTOTAL (5 x Level) | | | | | | | |
| Reflection | **Collection: Analysis/Synthesis**<br>Sample 1: Career/Life Project<br>• Mathematical Connection (Part A)<br>• Real World Connection (Part B) | ⓪<br>⓪ | ①<br>① | ②<br>② | ③<br>③ | ④<br>④ | ⑤<br>⑤ | 102<br>103 |
| | Sample 2: Personal Income Tax Form<br>• Mathematical Connection (Part A)<br>• Real World Connection (Part B) | ⓪<br>⓪ | ①<br>① | ②<br>② | ③<br>③ | ④<br>④ | ⑤<br>⑤ | 104<br>105 |
| | Sample 3: (Choice 1)<br>• Mathematical Connection (Part A)<br>• Real World Connection (Part B) | ⓪<br>⓪ | ①<br>① | ②<br>② | ③<br>③ | ④<br>④ | ⑤<br>⑤ | 106<br>107 |
| | Sample 4: (Choice 2)<br>• Mathematical Connection (Part A)<br>• Real World Connection (Part B) | ⓪<br>⓪ | ①<br>① | ②<br>② | ③<br>③ | ④<br>④ | ⑤<br>⑤ | 108<br>109 |
| | Sample 5: (Choice 3)<br>• Mathematical Connection (Part A)<br>• Real World Connection (Part B) | ⓪<br>⓪ | ①<br>① | ②<br>② | ③<br>③ | ④<br>④ | ⑤<br>⑤ | 110<br>111 |
| (75) | SUBTOTAL (1.5 x Level) | | | | | | | |

MET No.: _____

**TOTAL SCORE** /100

**FOR FURTHER INFORMATION**
**Assessment and Evaluation Branch**

Consumer Mathematics (40S)

Assessment Consultant:
Lorna Martin 945-8075
or toll-free at 1 800 282-8069, extension 8075

# Senior 4 Consumer Mathematics (40S)
# Standards Test

## Project
## Resource Package

## Booking a Band

Semester 1
2003

Manitoba
Education
and Youth

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Manitoba Education and Youth,
Assessment and Evaluation Branch,
Winnipeg, Manitoba R3E 3J5

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# Welcome to the 'Booking a Band' Project.

This resource package has been created to help you complete a booking project. You operate the agency that books musicians to play "gigs" across the province. Your task is to promote bands across Manitoba while making a profit for an entertainment agency. The agency has five musical groups under contract at a rate of $1 300 per musician per month. The contract also stipulates that when travel exceeds 100 kilometers, the band receives $0.35 per km for one vehicle. To complete this project, you must schedule one month of gigs using the various bands based on the many requests you have received for entertainment.

**General Instructions:**

Your class may have a 60-minute brainstorming session during the first work period, in which you may work with others, discuss, and research the project freely. Following the brainstorming session, your work must be individual. Your teacher is not permitted to assist you in developing or revising your project. Two additional 60-minute work periods will be devoted to creating individual projects based on the assigned topic. You may research your topic between work periods.You must submit an individual project that reflects your own work.

Develop a structured project in the form of a scheduling report. Your project must be separate from this booklet, be double-spaced and written, typed or printed in blue or black ink.

This resource package is designed to provide background information, charts, diagrams, and tables to assist you in completing your project. You may use additional or alternative resources if you wish. Remember to submit your project separate from this package.

## The "Booking a Band" Project

Here are the guidelines:

Your task is to promote bands across Manitoba and provide entertainment at a variety of venues while making a profit. You are creating a scheduling report for your entertainment agency.

The following limitations will affect your scheduling:

- The agency must be profitable. This may mean refusing some bookings.
- The agency pays each musician $1 300 per month, regardless of the number of bookings.
- The agency pays double occupancy at a hotel for one room per group for out of town gigs (minimum 100 km round trip). All other costs are at the band's expense.
- The agency must use the bands listed.
- The agency pays $0.35 per kilometer for one vehicle per band when travel exceeds 100 km (round trip).
- The same band cannot play the same venue for more than one week at a time.
- The agency reserves the right to schedule partial bookings (i.e., booking a band for one week of a three week request).

Bands available to you:

| Band | # of musicians | Base (location) of band | Musical genre |
|---|---|---|---|
| Kaufmann Trio | 3 | Winnipeg | Jazz |
| Country Hayshakers | 4 | Selkirk | Country |
| Rock-A-Bye | 4 | Winnipeg | Rock |
| Country Gentlemen | 5 | Brandon | Country |
| Strolling Sam | 1 | Winnipeg | Accordion |

Your project should include the following information:

- A structure of your choice
- Booking each band
- Schedule for the month
- A budget sheet or final cost breakdown of expenditures
- Explanations of your decisions to remain profitable

The following organizations have requested that you provide a band, and are willing to pay the listed amounts:

| Organization | Location | Genre | Audience Size (estimate) | Length of Gig* | Agency Revenue | Hotel |
|---|---|---|---|---|---|---|
| Morris Rodeo | Morris | Country | 500 | Mon.-Sat. ($9^{th}$–$14^{th}$) | $3 500/6 days | |
| Thompson Drillers | Thompson | Jazz | 150 | Mon.-Sat. (2 weeks) | $2 800/week | free accommodations |
| Dew Drop Inn | Brandon | Country | 200 | Mon.-Sat. (3 weeks) | $3 500/week | |
| Corydon Street | Winnipeg | Accordion | 150 | Thurs.-Sat. (3 weeks) | $400/week | |
| Ukrainian Festival | Dauphin | Accordion | 500 | Wed.-Sat. ($11^{th}$–$14^{th}$) | $750/4 days | |
| | | Country | 500 | Mon.-Sat. ($9^{th}$–$14^{th}$) | $3 000/6 days | |
| Tractor Pull | Virden | Country | 300 | Thurs.-Sat. ($19^{th}$-$21^{st}$) | $800/3 days | free accommodations |
| House of Rock | Winnipeg | Rock | 200 | Mon.-Sat. (2 weeks) | $3 500/week | |
| Dizzy's Club | Winnipeg | Jazz | 150 | Thurs.-Sat. (3 weeks) | $1 200/week | |
| Sand's Dance Club | Grand Beach | Rock | 150 | Fri.-Sat. (4 weeks) | $1 100/week | |
| Big Bob's | Winnipeg | Country | 175 | Mon.-Sat. (4 weeks) | $3 000/week | |
| Strauss Wedding | Winnipeg | Jazz | 125 | Fri.-Sat. ($20^{th}$, $21^{st}$) | $750/night | |
| Rolling Rocks | Winnipeg | Rock | 250 | Mon.-Sat. (3 weeks) | $4 000/week | |
| Forks Live (televised) | Winnipeg | Rock A Bye (requested) | 2 000 | Sun. ($29^{th}$) | free promotion | |

* All bookings are within the same month. Bands play from 8:00 p.m. to 2:00 a.m.
Weeks are not necessarily consecutive.
Dates are fixed and inclusive.

# MANITOBA DISTANCE GUIDE

**Distances are approximate. All distances in kilometres.**

**All Winnipeg distances shown are to P.T.H. 100 & P.T.H. 101 (Winnipeg Perimeter Highway)*

| | ALTONA | BEAUSEJOUR | BISSETT | BOISSEVAIN | BRANDON | CARBERRY | CARMAN | CRANBERRY PORTAGE | DAUPHIN | EMERSON | FALCON LAKE | FLIN FLON | GIMLI | GRAND BEACH | GRAND RAPIDS | GRANDVIEW | HECLA | KILLARNEY | LAC DU BONNET | LEAF RAPIDS | LYNN LAKE | MELITA | MINNEDOSA | MORDEN | MORRIS | NEEPAWA | PINE FALLS | PORTAGE LA PRAIRIE | RIVERS | ROBLIN | RUSSELL | SELKIRK | SNOW LAKE | SOURIS | STEINBACH | STONEWALL | SWAN RIVER | THE PAS | THOMPSON | VIRDEN | WASAGAMING | WINKLER | WINNIPEG BEACH | WINNIPEG* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALTONA | 171 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BEAUSEJOUR | 357 | 195 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BISSETT | 225 | 333 | 514 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BOISSEVAIN | 264 | 272 | 451 | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BRANDON | 216 | 235 | 410 | 124 | 51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CARBERRY | 79 | 149 | 335 | 192 | 198 | 153 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CARMAN | 826 | 758 | 907 | 713 | 637 | 660 | 750 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRANBERRY PORTAGE | 378 | 363 | 539 | 243 | 167 | 181 | 303 | 476 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DAUPHIN | 37 | 168 | 358 | 256 | 295 | 251 | 109 | 827 | 411 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMERSON | 230 | 129 | 280 | 413 | 359 | 311 | 217 | 869 | 467 | 217 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FALCON LAKE | 876 | 803 | 978 | 764 | 688 | 711 | 804 | 51 | 527 | 876 | 917 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FLIN FLON | 215 | 91 | 258 | 360 | 291 | 249 | 175 | 682 | 298 | 216 | 218 | 734 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GIMLI | 211 | 60 | 168 | 363 | 318 | 270 | 186 | 782 | 393 | 208 | 188 | 832 | 112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND BEACH | 545 | 474 | 646 | 601 | 525 | 499 | 472 | 355 | 403 | 542 | 585 | 406 | 402 | 500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND RAPIDS | 423 | 408 | 584 | 282 | 206 | 229 | 348 | 477 | 48 | 456 | 512 | 528 | 340 | 436 | 450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRANDVIEW | 308 | 184 | 351 | 444 | 376 | 334 | 266 | 717 | 326 | 309 | 311 | 768 | 93 | 210 | 434 | 374 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HECLA | 192 | 303 | 489 | 34 | 101 | 107 | 171 | 738 | 265 | 223 | 388 | 789 | 336 | 333 | 604 | 307 | 419 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KILLARNEY | 218 | 48 | 164 | 375 | 319 | 278 | 192 | 790 | 406 | 220 | 119 | 845 | 125 | 89 | 513 | 451 | 218 | 350 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LAC DU BONNET | 1086 | 1018 | 1192 | 1142 | 1069 | 1042 | 1018 | 548 | 953 | 1088 | 1131 | 602 | 950 | 1046 | 543 | 998 | 978 | 1150 | 1059 | | | | | | | | | | | | | | | | | | | | | | | | | |
| LEAF RAPIDS | 1191 | 1124 | 1297 | 1250 | 1176 | 1148 | 1123 | 654 | 1058 | 1193 | 1236 | 707 | 1055 | 1151 | 650 | 1099 | 1084 | 1255 | 1164 | 106 | | | | | | | | | | | | | | | | | | | | | | | | |
| LYNN LAKE | 298 | 394 | 583 | 82 | 130 | 182 | 269 | 682 | 298 | 329 | 490 | 734 | 424 | 432 | 661 | 285 | 509 | 106 | 444 | 1198 | 1304 | | | | | | | | | | | | | | | | | | | | | | | |
| MELITA | 277 | 278 | 452 | 127 | 48 | 74 | 201 | 595 | 122 | 307 | 363 | 646 | 295 | 322 | 477 | 167 | 380 | 149 | 327 | 1027 | 1127 | 179 | | | | | | | | | | | | | | | | | | | | | |
| MINNEDOSA | 48 | 183 | 374 | 173 | 216 | 168 | 40 | 780 | 342 | 85 | 260 | 843 | 216 | 220 | 511 | 387 | 311 | 138 | 235 | 1057 | 1162 | 246 | 235 | | | | | | | | | | | | | | | | | | | |
| MORDEN | 45 | 130 | 312 | 225 | 253 | 204 | 63 | 781 | 365 | 43 | 185 | 832 | 170 | 166 | 495 | 410 | 263 | 203 | 173 | 1046 | 1151 | 303 | 262 | 74 | | | | | | | | | | | | | | | | | | |
| MORRIS | 249 | 257 | 425 | 150 | 75 | 45 | 172 | 614 | 135 | 278 | 336 | 665 | 268 | 295 | 453 | 188 | 353 | 152 | 299 | 997 | 1103 | 204 | 29 | 212 | 233 | | | | | | | | | | | | | | | | | |
| NEEPAWA | 241 | 79 | 120 | 396 | 336 | 296 | 214 | 811 | 423 | 242 | 166 | 862 | 142 | 43 | 530 | 468 | 235 | 370 | 43 | 1076 | 1181 | 465 | 340 | 254 | 201 | 313 | | | | | | | | | | | | | | | | |
| PINE FALLS | 150 | 151 | 322 | 200 | 126 | 80 | 72 | 709 | 236 | 178 | 234 | 760 | 164 | 193 | 448 | 283 | 251 | 181 | 196 | 994 | 1099 | 258 | 127 | 114 | 135 | 101 | 216 | | | | | | | | | | | | | | | |
| PORTAGE LA PRAIRIE | 299 | 310 | 483 | 116 | 40 | 82 | 230 | 635 | 169 | 332 | 393 | 686 | 325 | 352 | 534 | 217 | 410 | 145 | 357 | 1077 | 1182 | 135 | 53 | 253 | 290 | 77 | 373 | 163 | | | | | | | | | | | | | | |
| RIVERS | 459 | 456 | 632 | 304 | 229 | 259 | 389 | 443 | 97 | 492 | 548 | 494 | 388 | 484 | 464 | 48 | 422 | 330 | 499 | 957 | 1063 | 240 | 190 | 420 | 446 | 215 | 516 | 313 | 192 | | | | | | | | | | | | | |
| ROBLIN | 406 | 414 | 588 | 251 | 176 | 208 | 331 | 493 | 150 | 439 | 495 | 547 | 427 | 456 | 517 | 101 | 475 | 277 | 455 | 1010 | 1116 | 187 | 137 | 367 | 393 | 162 | 472 | 264 | 139 | 53 | | | | | | | | | | | | |
| RUSSELL | 163 | 38 | 209 | 308 | 246 | 200 | 131 | 721 | 333 | 164 | 166 | 772 | 52 | 60 | 440 | 378 | 145 | 283 | 73 | 984 | 1090 | 378 | 250 | 170 | 118 | 223 | 90 | 119 | 283 | 426 | 382 | | | | | | | | | | | |
| SELKIRK | 818 | 745 | 919 | 833 | 757 | 772 | 745 | 152 | 596 | 819 | 858 | 203 | 677 | 773 | 273 | 597 | 706 | 858 | 786 | 469 | 572 | 805 | 715 | 784 | 772 | 726 | 803 | 721 | 755 | 565 | 618 | 716 | | | | | | | | | | |
| SNOW LAKE | 255 | 313 | 496 | 63 | 47 | 97 | 192 | 681 | 212 | 293 | 376 | 732 | 335 | 348 | 572 | 250 | 420 | 90 | 360 | 1116 | 1222 | 93 | 97 | 207 | 243 | 119 | 380 | 169 | 52 | 241 | 188 | 290 | 806 | | | | | | | | | |
| SOURIS | 114 | 68 | 264 | 295 | 275 | 237 | 132 | 786 | 388 | 99 | 116 | 832 | 134 | 129 | 505 | 436 | 222 | 272 | 119 | 1051 | 1156 | 372 | 283 | 143 | 69 | 261 | 148 | 154 | 312 | 468 | 417 | 82 | 782 | 296 | | | | | | | | |
| STEINBACH | 163 | 68 | 231 | 280 | 212 | 170 | 111 | 692 | 299 | 164 | 195 | 738 | 79 | 94 | 407 | 348 | 168 | 255 | 107 | 950 | 1057 | 345 | 246 | 150 | 118 | 189 | 124 | 87 | 246 | 396 | 348 | 35 | 679 | 256 | 103 | | | | | | | |
| STONEWALL | 550 | 535 | 711 | 409 | 333 | 356 | 475 | 318 | 172 | 583 | 639 | 372 | 467 | 565 | 345 | 169 | 501 | 434 | 578 | 835 | 941 | 360 | 291 | 514 | 537 | 307 | 595 | 405 | 314 | 122 | 175 | 505 | 444 | 362 | 559 | 471 | | | | | | |
| SWAN RIVER | 735 | 662 | 837 | 623 | 547 | 570 | 663 | 90 | 386 | 735 | 776 | 141 | 593 | 691 | 262 | 387 | 627 | 648 | 704 | 609 | 714 | 593 | 505 | 702 | 691 | 524 | 721 | 619 | 545 | 353 | 406 | 631 | 209 | 591 | 691 | 597 | 231 | | | | | |
| THE PAS | 872 | 804 | 976 | 928 | 855 | 828 | 802 | 334 | 734 | 876 | 915 | 385 | 732 | 830 | 329 | 781 | 764 | 935 | 843 | 213 | 320 | 985 | 811 | 841 | 827 | 782 | 860 | 778 | 859 | 743 | 796 | 770 | 252 | 904 | 837 | 736 | 621 | 392 | | | | |
| THOMPSON | 324 | 352 | 526 | 132 | 76 | 122 | 261 | 614 | 232 | 362 | 435 | 666 | 372 | 391 | 597 | 219 | 452 | 159 | 395 | 1131 | 1237 | 69 | 127 | 276 | 312 | 145 | 414 | 198 | 66 | 172 | 117 | 317 | 735 | 71 | 355 | 288 | 291 | 525 | 918 | | | |
| VIRDEN | 325 | 328 | 502 | 171 | 100 | 124 | 251 | 544 | 69 | 357 | 410 | 595 | 345 | 367 | 462 | 113 | 384 | 196 | 378 | 1008 | 1087 | 228 | 51 | 285 | 314 | 79 | 390 | 180 | 101 | 164 | 122 | 300 | 664 | 139 | 330 | 266 | 241 | 454 | 764 | 163 | | |
| WASAGAMING | 39 | 192 | 373 | 184 | 227 | 179 | 40 | 791 | 341 | 69 | 249 | 869 | 229 | 220 | 510 | 386 | 309 | 149 | 232 | 1056 | 1161 | 257 | 240 | 11 | 69 | 211 | 257 | 113 | 264 | 422 | 369 | 166 | 783 | 222 | 134 | 149 | 513 | 701 | 840 | 287 | 290 | |
| WINKLER | 201 | 77 | 244 | 345 | 277 | 235 | 161 | 699 | 312 | 202 | 204 | 749 | 14 | 98 | 416 | 356 | 107 | 314 | 117 | 964 | 1069 | 406 | 281 | 201 | 156 | 254 | 128 | 152 | 311 | 404 | 413 | 37 | 692 | 322 | 120 | 69 | 483 | 608 | 748 | 353 | 331 | 210 |
| WINNIPEG BEACH | 98 | 46 | 227 | 241 | 197 | 158 | 62 | 692 | 304 | 96 | 126 | 743 | 76 | 87 | 408 | 349 | 164 | 217 | 91 | 952 | 1066 | 310 | 203 | 104 | 52 | 175 | 111 | 70 | 227 | 386 | 338 | 21 | 679 | 226 | 48 | 24 | 476 | 602 | 738 | 277 | 253 | 102 |
| WINNIPEG* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 66 |

Month _____ Year _____

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## Hotel Room Rates[1]

| Location | Rate per night[2] |
|---|---|
| Morris | $70.00 |
| Stonewall | $65.00 |
| Thompson | $100.00 |
| Winnipeg | $80.00 |
| Brandon | $70.00 |
| Dauphin | $65.00 |
| Virden | $70.00 |
| Grand Beach | $97.00 |

[1] Prices do not include applicable taxes
[2] Based on double occupancy ($10.00 per extra occupant, maximum 3 people.)

# Senior 4 Consumer Mathematics (40S)
# Standards Test

## Sample Response to Project

## BOOKING A BAND

**Semester 1**
**2003**

Manitoba
Education
and Youth

Note to teacher:

A variety of organizational structures and types of responses to the Booking A Band Project are anticipated.

This document provides a sample response to the Project. It's purpose is to assist teachers in detecting reasonable calculations and sufficient data when scoring student projects.

Student explanations for their decision making will vary. When determining whether to schedule a 'gig' or not, students may consider many issues, including:

- distance travelled by the musicians
- public exposure/publicity for the musicians (based on audience size and/or location
- revenue generated versus cost to the agency
- length of 'gig'
- fatigue of musicians

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Manitoba Education and Youth,
Assessment and Evaluation Branch,
Winnipeg, Manitoba R3E 3J5

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## Itinerary

| **Kaufman Trio** | | | |
|---|---|---|---|
| Monday - Saturday | 2nd – 7th | Dizzy's | Winnipeg |
| Monday - Saturday | 9th – 14th | Driller's | Thompson |
| Friday and Saturday | 20th – 21st | Strauss Wedding | Winnipeg |
| Monday - Saturday | 23rd – 28th | Driller's | Thompson |

| **Country Hayshakers** | | | |
|---|---|---|---|
| Monday - Saturday | 2nd – 7th | Big Bob's | Winnipeg |
| Monday - Saturday | 9th – 14th | Rodeo | Morris |
| Monday - Saturday | 16th – 21st | Dew Drop Inn | Brandon |
| Monday - Saturday | 23rd – 28th | Big Bob's | Winnipeg |

| **Rock-A-Bye** | | | |
|---|---|---|---|
| Monday - Saturday | 2nd – 7th | House of Rock | Winnipeg |
| Monday - Saturday | 9th – 14th | Rolling Rocks | Winnipeg |
| Monday – Saturday | 16th – 21st | Sand's | Grand Beach |
| Monday – Saturday | 23rd – 28th | Rolling Rocks | Winnipeg |
| Sunday | 29th | Forks | Winnipeg |

| **Country Gentlemen** | | | |
|---|---|---|---|
| Monday - Saturday | 2nd – 7th | Dew Drop Inn | Brandon |
| Monday - Saturday | 9th – 14th | Ukrainian Festival | Dauphin |
| Thursday - Saturday | 19th – 21st | Tractor Pull | Virden |
| Monday – Saturday | 23rd – 28th | Dew Drop Inn | Brandon |

| **Strolling Sam** | | | |
|---|---|---|---|
| Thursday – Saturday | 5th – 7th | Corydon Street | Winnipeg |
| Thursday – Saturday | 11th - 14th | Ukrainian Festival | Dauphin |
| Thursday – Saturday | 19th – 21st | Corydon Street | Winnipeg |

## Country Schedule

**Month** _____ **Year** _____

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | ← Big Bob's—Winnipeg—Country Hayshakers → | | | | | |
| | ← Dew Drop Inn—Brandon—Country Gentlemen → | | | | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | ← Morris Rodeo—Morris—Country Hayshakers → | | | | | |
| | ← Ukrainian Festival—Dauphin—Country Gentlemen → | | | | | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| | | | | ← Tractor Pull—Virden—Country Gentlemen → | | |
| | ← Dew Drop Inn—Brandon—Country Hayshakers → | | | | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | ← Dew Drop Inn—Brandon —Country Gentlemen → | | | | | |
| | ← Big Bob's—Winnipeg —Country Hayshakers → | | | | | |
| 29 | 30 | 31 | | | | |

## Rock Schedule

Month _____ Year _____

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | ← House of Rock— Winnipeg → | | | | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | ← Rolling Rocks—Winnipeg → | | | | | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| | ← Sand's—Grand Beach → | | | | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | ← Rolling Rocks—Winnipeg → | | | | | |
| 29 Forks Winnipeg | 30 | 31 | | | | |

## Jazz Schedule

Month _____ Year _____

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | ← Dizzy's—Winnipeg → | | | | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | ← Thompson Drillers—Thompson → | | | | | |
| 5 | 16 | 17 | 18 | 19 | 20 | 21 |
| | | | | | ← Strauss Wedding—Winnipeg → | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | ← Thompson Drillers—Thompson → | | | | | |
| 29 | 30 | 31 | | | | |

## Strolling Accordionist Schedule

Month _____ Year _____

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | | | ← Corydon Street—Winnipeg → | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | | | ← Ukrainian Festival—Dauphin → | | | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| | | | | ← Corydon Street—Winnipeg → | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## The Booking A Band Project

| Band | Salaries | Venue | Agency Income from Venue | Kilometerage | Hotels | Total Revenue | Total Expenses | Profit |
|---|---|---|---|---|---|---|---|---|
| Country Hayshakers | 4 × 1 300 = $5 200 | Big Bob's 2 weeks | 6 000 | | | $13 000 | $6 412.40 | $13 000 - $6 412.40 = $6 587.60 |
| | | Morris 1 week | 3 500 | 2 × 118 × .35 = $82.60 | (70 × 6) × 1.14 = $478.80 | | | |
| | | D D Inn 1 week | 3 500 | 2 × 246 × .35 = $172.20 | (70 × 6) × 1.14 = $478.80 | | | |
| Country Gentlemen | 5 × 1 300 = $6 500 | D D Inn 2 weeks | 7 000 | | | $10 800 | $7 061.50 | $10 800 - $7 061.50 = $3 738.50 |
| | | Ukrainian Festival 1 week | 3 000 | 2 × 167 × .35 = $116.90 | (6 × 65) × 1.14 = $444.60 | | | |
| | | Tractor Pull 3 days | 800 | | | | | |
| Rock A Bye | 4 × 1 300 = $5 200 | Rolling Rocks 2 weeks | 8 000 | | | $12 600 | $5 200 | $12 600 - $5 200 = $7 400 |
| | | House of Rock 1 week | 3 500 | | | | | |
| | | Sand's 1 week | 1 100 | | | | | |
| | | Forks 1 day | 0 | | | | | |
| Kaufman Trio | 3 × 1 300 = $3 900 | Thompson 2 weeks | 5 600 | 4 × 738 × .35 = $1 033.20 | free accommodation | $8 300 | $4 933.20 | $8 300 - $4 933.20 = $3 366.80 |
| | | Strauss Wedding 2 days | 1 500 | | | | | |
| | | Dizzy's 1 week | 1 200 | | | | | |
| Strolling Sam | 1 × 1 300 = $1 300 | Dauphin 4 days | 750 | 2 × 304 × .35 = $212.80 | 4 × 65 × 1.14 = $296.40 | $1 550 | $1 809.20 | $1 550 - $1 809.20 = -$259.20 (loss) |
| | | Corydon 3 days × 2 | 800 | | | | | |
| **TOTAL** | **$22 100** | | **$46 250** | **$1 617.70** | **$1 698.60** | **$46 250** | **$25 416.30** | **$20 833.70** |

## Overall Profit

| | |
|---|---|
| Rock A Bye | $7 400.00 |
| Country Gentlemen | $3 738.50 |
| Kaufman Trio | $3 366.80 |
| Country Hayshakers | $6 587.60 |
| Strolling Sam | -$259.20 (loss) |
| **Total Profit** | $20 833.70 |

### Explanations

Because one group could not play the same gig two weeks in a row, the Jazz Combo eliminated 1 week at Dizzy's to accommodate the Strauss Wedding and therefore played only one of three weeks at Dizzy's. This same problem occurred with the Sand's at Grand Beach, so Rock a Bye played only one week and Strolling Sam could only play 2 out of 3 weeks at Corydon.

Although the agency would have made more profit by eliminating some venues, the promotion of the bands was more important. The agency still made money.

# Senior 4 Consumer Mathematics (40S)
# Standards Test

## Project
## Scoring Guide

## Semester 1
## 2002-2003

Manitoba
Education
and Youth

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# Recommended Project Scoring Strategy

## Project Scoring Rubric

The scoring rubric for the Project for the Senior 4 Consumer Mathematics Standards Test is based on the student learning outcomes and standards found in the *Senior 4 Mathematics—Manitoba Curriculum Framework of Outcomes and Senior 4 Standards (2001).*

The scoring rubric is designed to assess a wide range of student performance. This rubric distinguishes Senior 4 student performance into three levels: Level 1 (Below Level), Level 2 (At Level), and Level 3 (Above Level). Level 1 and Level 2 are further divided into two sub-categories: Approaching Level 2 and Approaching Level 3. This subdivision of the levels allows markers to detect and identify student performance that is nearing these levels, but has not yet consistently demonstrated all or most of its requirements. Level 3 however, consists of one category for scoring the Project.

The *Project Scoring Rubric* consists of four elements:

| | |
|---|---|
| *Format:* | Impression, structure and organization |
| *Data Content:* | Data collection, selection and presentation |
| *Data Interpretation:* | Data reflection, analysis and mathematics procedures |
| *Concepts:* | Mathematical concepts, connections, synthesis and solutions |

### Dimension 1 – Format

*THE MARKER HOLISTICALLY SCANS THE PROJECT*

This scoring dimension focuses on overall structure and organization. The marker is answering the question, "Generally, is the project inviting, easy to follow, carefully constructed?" The following marking strategy is recommended:

- Scan the student project.
- Form a general, holistic sense of the project based on the fact that Level 2 is considered "at standard".
- Read the descriptors under Level 2 (which are identical to the outcomes) and decide if they appropriately describe the project you have scanned. If not, read the descriptors of the level above or below.
- If only some of the descriptors in a particular level of performance fit, determine the degree to which the project is approaching the next or previous level and whether the "approaching level" is a more appropriate description of the project.

### Dimensions 2 and 3 – Data Content/Interpretation

*THE MARKER HOLISTICALLY READS THE PROJECT*

Dimensions 2 and 3 focus on data and mathematical procedures. The marker is answering the question, "Is the data relevant and presented in a reader-friendly way?" and "Has data been manipulated using consumer mathematics terminology, skills and strategies?" The following marking strategy is recommended:

- Look for evidence relating to data; more specifically, look for evidence of data collection, selection and presentation as well as reflection, analysis and mathematical procedures.
- Score these two dimensions by having an in-depth look at the student's project.

- For each dimension, determine which performance level best describes the project.
- Check individual descriptors. If the work is not at a specific level, consider an "approaching level".

### Dimension 4 – Concepts

*THE MARKER HOLISTICALLY REFLECTS ON THE PROJECT*

Dimension 4 focuses on mathematical concepts, the connection and synthesis of ideas and solutions. The marker is answering the question, "Generally, was there a sense that the student grasped essential mathematical concepts throughout the project?" The following marking strategy is recommended:

- Recall the student's project.
- In a holistic way, consider the project in terms of the degree of evidence that the student grasped essential mathematical concepts.

Overall, determine which level of performance best describes the use of general concepts throughout the project.

### Recording of Marks

- Match the pre-printed booklet identification number on the *Scoring* (scan) *Sheet* with the identification number written on each student's project.

- **Always** use an HB pencil to complete the *Scoring* (scan) *Sheet*(s).

- Indicate each student's score in each dimension by writing and by shading the corresponding mark value.

- Keep a photocopy of the *Attendance Form*(s). It is the only record connecting students to their work and to the *Project Scoring* (scan) *Sheet*(s).

- Keep a copy of the *Project Scoring* (scan) *Sheets* (optional) for school records.

- Forward the original *Project Scoring* (scan) *Sheets* to the department according to the instructions in the *Administration Manual for Supervising Teachers.*

### Project Recording Sheet

A copy of the *Project Scoring Sheet* is provided on page 5. This sheet may be photocopied for use as a *Double Marking Sheet* for the Project component when a two-marker system is employed. When double marking, the booklet number of the Project being marked must replace the MET number on the photocopied Scoring Sheet. Remember: final scores on the Project component must be submitted to the department on the official, scannable *Project Scoring Sheets.*

### Reporting of Marks

A sample *Project Scoring Sheet* for the Project component is provided on page 5. This sample represents the scannable sheets that must be used to record the marks from the Project component of the standards test.

If you would like an example of calculating a student's final mark on all components of the standards test, please see page 29 in the *Information for Local Marking Co-ordinators*.

# Project Scoring Preparations for Local Marking Using the Centralized Marking Model

### Selection of exemplars for training markers

- From the student projects, select 3–5 samples to be used in familiarizing the markers with the *Project Scoring Guide* and the *Project Scoring Rubric*. The training exemplars should cover a range of performance (weak, typical and strong). The selection can be conducted by the Local Marking Co-ordinator and/or a small group of volunteer colleagues (markers/team leaders).
- Mark the selected training exemplars using the *Project Scoring Guide*. Provide all markers with a copy of all the training exemplars. Then use the *Project Scoring Rubric* to mark these booklets and discuss the scoring with the team as part of the training.

### Selection of exemplars for marking reviews

Exemplars are selected to review marking consistency. Based on the number of reviews planned, select an appropriate number of *Projects* to be marked. Score these *Projects* with a small group of markers (team leaders). Photocopy the selected *Projects* according to the total number of markers. The selection of exemplars can be conducted when the training exemplars are being chosen.

## Marker training

Markers review the Projects, the *Project Scoring Guide*, the *Project Scoring Rubric* and examine student exemplars. They also practice with training exemplars.

## Mark projects

- When training is completed, each marker takes one bundle of projects and starts marking. Markers record marks on the *Project Scoring* (scan) *Sheet*(s).
- Careful application of the *Project Scoring Rubric* will ensure high levels of consistency.
- A copy of a *Project Scoring Sheet* is found on page 5. If a double marking model is adopted, please use two copies of the *Project Scoring Sheet*. Booklet ID numbers need to be noted on both *Project Scoring Sheets*.
- When using the two-marker system, a local decision regarding discrepancies between first and second marking must be made prior to marking session. An individual must be designated to transcribe the final marks on the official *Scoring* (scan) *Sheet*(s).

## Once marking is completed

- When marking is completed, remove the *Scoring* (scan) *Sheet* from each project.
- After a bundle has been marked, verify that each *Scoring* (scan) *Sheet* has been completed correctly.

*Projects* and *Scoring* (scan) *Sheets* can be put in numerical order for easy retrieval.

Manitoba Education, Training and Youth

PLEASE DO NOT WRITE IN THIS AREA

[SERIAL]

Senior 4 Consumer Mathematics (40S) Standards Test—2003

# Project Scoring Sheet

**INSTRUCTIONS**

- Use an HB pencil only.
- Do not use ballpoint or felt tip pens.
- Do not mark other areas on this form.
- Shade the appropriate circle.
- Erase cleanly any marks you wish to change.

CORRECT: ● INCORRECT: ✓ ✗ – °

**IMPORTANT: Please verify that the above number corresponds with the student's number on the *Attendance Form* and on the student's project.**

| | | No mark | Level 1 | Approaching Level 2 | Level 2 | Approaching Level 3 | Level 3 | |
|---|---|---|---|---|---|---|---|---|
| Format | **Impression/Structure/Organization**<br>**Generally, is the project inviting, easy to follow, carefully constructed?**<br>• Impression<br>• Structure (e.g., introduction, body, conclusion, headings, sections...)<br>• Organization of ideas | ⓪ | ① | ② | ③ | ④ | ⑤ | /15 |
| (15) | SUBTOTAL (3 x Level) | | | | | | | |
| Data—Content | **Data Collection/Selection/Presentation**<br>**Is the data relevant and presented in a reader-friendly way?**<br>• Collection • Selection<br>• Presentation (e.g., charts, tables, diagrams, graphs) | ⓪ | ① | ② | ③ | ④ | ⑤ | /30 |
| (30) | SUBTOTAL (6 x Level) | | | | | | | |
| Data—Interpretation | **Data Reflection/Analysis/Mathematical Procedures**<br>**Has data been manipulated using consumer mathematics terminology, skills and strategies?**<br>• Terminology and Knowledge • Reflection<br>• Analysis (analysis, comparison, recognition of patterns)<br>• Mathematical procedures | ⓪ | ① | ② | ③ | ④ | ⑤ | /40 |
| (40) | SUBTOTAL (8 x Level) | | | | | | | |
| Concepts | **Concepts/Connections/Synthesis/Solutions**<br>**Generally, is there a sense that the student grasped essential mathematical concepts throughout the project?**<br>• Solutions • Synthesis • Connections | ⓪ | ① | ② | ③ | ④ | ⑤ | /15 |
| (15) | SUBTOTAL (3 x Level) | | | | | | | |
| MET No.: _____ | | | | | | | TOTAL SCORE | /100 |

| Consumer Mathematics 40S PROJECT Scoring Rubric (New) | | Level 1 Project | Level 2 Project | Level 3 Project |
|---|---|---|---|---|
| Format | **Impression/Structure/ Organization** | **Incomplete Project:** *Inconsistent or incomplete project* | **Complete Project:** *Clear and complete project* | **Clear, Complete Project:** *Clear, coherent, and complete project* |
| | • Impression | • Unclear arrangement; partially legible | • Clear arrangement; legible | • Logical and clear arrangement; legible |
| | • Structure (e.g., introduction, body, conclusion, headings, sections…) | • Haphazard structure; loosely relates to requirements of project | • Clear structure; relates to requirements of project | • Structure is clear and effective for project |
| | • Organization of Ideas | • Disorganized ideas | • Organized ideas | • Organized ideas |
| Data—Content | **Data Collection/Selection/ Presentation** | **Limited Data:** *Lacks a central focus; details are sketchy or not present* | **Routine Data:** *Some focus; clarity may be limited* | **Thorough/Insightful Data:** *Insightful thinking for selection of data* |
| | • Collection (required elements) | • Limited number of required elements present | • All required elements present | • All required elements present and easy to follow |
| | • Selection | • Incomplete exploration of concepts, patterns or relationships | • Complete exploration of data; analyzes, compares, recognizes patterns | • Insightful exploration of data; links analysis of concepts, patterns or relationships |
| | • Presentation (e.g., charts, tables, diagrams, graphs) | • Incomplete/limited, or unconnected presentation of data; some data unrelated to project | • Relevant presentation of data; some data loosely connected | • Relevant and connected presentation of data |
| Data—Interpretation | **Data Reflection/Analysis/ Mathematical Procedures** | **Limited Use of Procedures:** *Imprecise use of mathematical terms, principles, or procedures* | **Appropriate Use of Procedures:** *Appropriate use of mathematical terms, principles, or procedures* | **Full Use of Appropriate Procedures:** *Principles used efficiently while justifying the solution* |
| | • Terminology and Knowledge | • Limited knowledge; inappropriate or limited use of basic terms | • General knowledge and appropriate use of basic terms | • Integrated use of appropriate terms and knowledge |
| | • Reflection | • Weak, random statements, no generalization related to project | • Correct statements; some generalizations related to project | • Correct statements; appropriate generalizations related to project |
| | • Analysis (analysis, comparison, recognition of patterns) | • Weak/limited decisions/conclusions based on data | • Relevant decisions/conclusions based on most data | • Direct link between decisions/conclusions and data |
| | • Mathematical procedures | • Basic procedures correct; major computational errors | • Generally correct; some computational errors | • Specific/effective procedures correct; minor computational errors |
| Concepts | **Concepts/Connections/ Synthesis/Solutions** | **Partial Understanding:** *Concepts throughout project are related or applied inconsistently* | **General Understanding:** *Uses general concepts throughout the project* | **Clear Understanding:** *Uses all relevant concepts throughout the project* |
| | • Solutions | • Partial explanation of situation/context of project | • General explanation of situation/context of project | • Clear explanation of situation/context of project |
| | • Synthesis | • Some ideas are unrelated to mathematical concepts; errors in reasoning | • Most ideas relate to mathematical concepts; logical reasoning | • All ideas link mathematical concepts together; insightful reasoning |
| | • Connections | • Weak/partial connection between mathematical concepts and everyday activities | • General connection between mathematical concepts and everyday activities | • Direct link between mathematical concepts and everyday activities |

| Performance Level: | Level 1 | Approaching Level 2 | Level 2 | Approaching Level 3 | Level 3 |
|---|---|---|---|---|---|

# Senior 4 Consumer Mathematics (40S)
# Standards Test

## Written Test
## Student Booklet

**January 2003**

Manitoba
Education
and Youth

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# Senior 4 Consumer Mathematics (40S)
# Standards Test—January 2003
# Written Test Student Booklet

DESCRIPTION

**Total Possible Marks: 40** **Maximum Time: 90 minutes**

**This component of the test consists of six parts:**

| Learning Unit | Suggested Time to Complete | Marks |
|---|---|---|
| Personal Finance | 7 minutes | 7 |
| Government Finances | 8 minutes | 8 |
| Statistics | 6 minutes | 6 |
| Design and Measurement | 8 minutes | 6 |
| Variation and Formulas | 8 minutes | 6 |
| Investments | 8 minutes | 7 |

- Students may use the resource package containing formulas and tables.
- Use of a calculator and ruler is required.
- Read all instructions on the test carefully.
- **If you need more space to answer a question, extra pages may be provided by your teacher. Write your booklet ID number and question number on any extra page(s) used and staple it(them) into the booklet where your answer begins.**

**Remember to:**

- Show all your work in this booklet
- Use your resource package
- Use a calculator
- Use a ruler

## DIRECTIONS

- Show **complete answers** in the space(s) provided in your student booklet
- Let the mark values for each question guide you in answering it.
- Show all your work.
- Use your resource package.
- Provide explanations and justifications.
- Use a systematic and well-organized method in communicating the answer.

### Directing Words

Some questions may include directing words such as *explain, illustrate,* and *calculate.* These words are explained below.

| The Word | The question is asking for... |
|---|---|
| identify/name/list/state | a label or title of an item, concept or method |
| defend/justify/support | an explanation, information, or evidence that shows why your method, idea or answer is good |
| explain/describe/express | words or symbols, diagrams, a chart or graph, or other methods that **make clear** what you mean or what you are thinking |
| illustrate/sketch | a reasonably neat picture or diagram (not necessarily to scale) that shows or explains an idea or method |
| draw | a diagram to scale that shows or explains an idea or method |
| calculate/find/determine | a mathematical formula or algebraic equation or numerical calculation to solve a problem |

**PLEASE WAIT UNTIL THE TEACHER TELLS YOU TO TURN THE PAGE.**

# Personal Finance

DO NOT USE

2 Marks

1. Amy Stewart is a 21-year-old female smoker. She is interested in purchasing a life insurance policy with a face value of $100 000.
Calculate her annual premium if she chooses a 10-year term life policy. 116

2 Marks

2. Marcel lives in a large apartment building. He would like to insure the contents of his suite for $45 000.
Calculate his premium for the year if he selects a standard policy with $200.00 deductible. 117

1 Mark

DO NOT USE

3. Explain why you pay less interest in the second month of a mortgage than in the first month. 118

2 Marks

4. Jacob Whitehold is a 20-year-old male who plays extreme sports and is purchasing a $100 000 life insurance policy. Use the life insurance tables and your knowledge of term and whole life insurance policies to complete the chart: 119

| | ADVANTAGES FOR JACOB | DISADVANTAGES FOR JACOB |
|---|---|---|
| Term Life | | |
| Whole Life | | |

# Government Finances

DO NOT USE

2.5 Marks

5. Danielle's brother purchases an old dresser at an auction. In one of the drawers he finds a box with foreign currency. There are 2 500 yen and 50 Hong Kong dollars. What is the total value of the money in Canadian funds?

120

1 Mark

DO NOT USE

6. The Dominiski family is considering a move to a rural town in southeastern Manitoba. They are unsure of the town's mill rate.
Calculate the mill rate, based on the following information:
Town budget: $10 250 000.00
Total Portioned Assessed Value: $450 000 000.00

121

1.5 Marks

7. The current assessed value of a home is $145 000 and the land is $25 000.
Calculate the total current portioned assessment when the portioned rate of assessment is 45 percent.

122

3 Marks

DO NOT USE

123

8. A gas station advertises regular gasoline at 70.9 cents per litre. Jonathan purchases 40 litres of gasoline at the regular price. There is a 3.5 cent per litre discount at the pump.

A) Calculate the amount of gasoline tax that Jonathan pays.

B) Calculate the total cost of Jonathan's gas purchase **without** the discount.

C) Calculate the total cost of Jonathan's gas purchase **with** the discount.

# Statistics

DO NOT USE

4 Marks

9. The average precipitation for the city of Brandon (to the nearest mm) for the months of the year from 1969 to 1990 was as follows: 124

| Month | Average Monthly Precipitation (mm) |
|---|---|
| January | 21 |
| February | 19 |
| March | 23 |
| April | 38 |
| May | 49 |
| June | 75 |
| July | 72 |
| August | 71 |
| September | 51 |
| October | 24 |
| November | 16 |
| December | 21 |

A) Calculate the mean of the data.

B) Calculate the range of the data.

*(continued on next page)*

C) Calculate the standard deviation of the data using the following table.

DO NOT USE

| Precipitation ($x$) | Difference from Mean ($x - \bar{x}$) | Square of Difference $(x - \bar{x})^2$ |
|---|---|---|
| 21 | | |
| 19 | | |
| 23 | | |
| 38 | | |
| 49 | | |
| 75 | | |
| 72 | | |
| 71 | | |
| 51 | | |
| 24 | | |
| 16 | | |
| 21 | | |
| TOTAL | Sum | Sum |

2 Marks

10. Stan wants to study at a U.S. college after graduating. He has to be in the 75th percentile or higher on their entrance exam to be accepted. Fifty seven students wrote the entrance exam. Stan earned a score of 137 out of 175. Thirty-nine students scored lower than Stan. Three other students earned 137 out of 175. 125

A) Determine Stan's percentile ranking.

B) State whether Stan can be accepted with a score of 137 out of 175.

# Design and Measurement

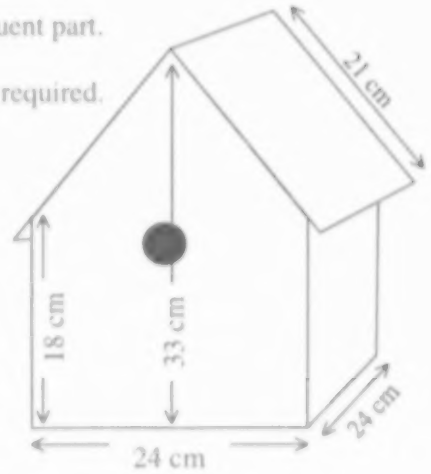
DO NOT USE

4 Marks

11. Draw the constituent parts of the birdhouse shown below. 126

A) Indicate the actual dimensions of each constituent part.

B) Indicate how many of each constituent part is required. Use the graph paper provided.



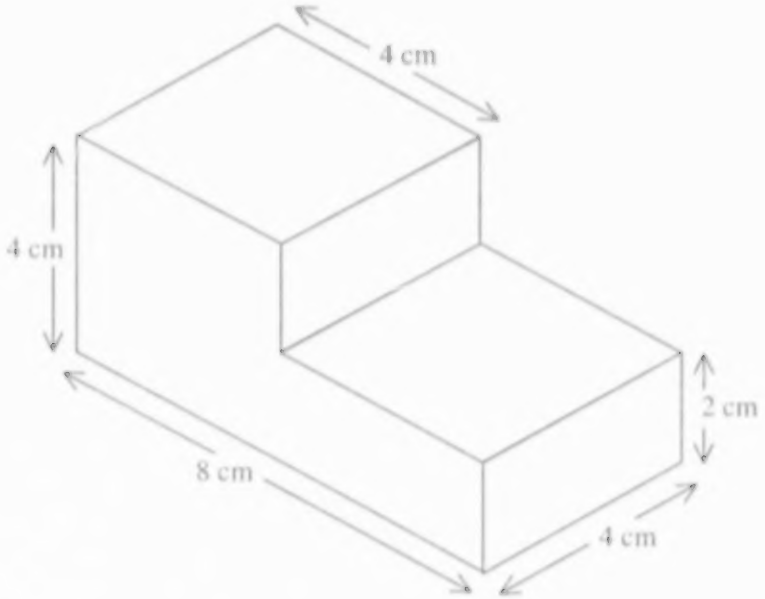

(diagram not to scale)

2 Marks

DO NOT USE

127

12. Draw an oblique projection of the object shown below.
Use the graph paper provided. State the scale used.



# Variation and Formulas

DO NOT USE

2 Marks

13. The approximate volume of a sphere varies directly as the cube of its radius. The volume of a sphere with a radius of 3 cm is 108 $cm^3$. Find the volume of water needed to fill a water balloon with a radius of 5 cm. 128

4 Marks

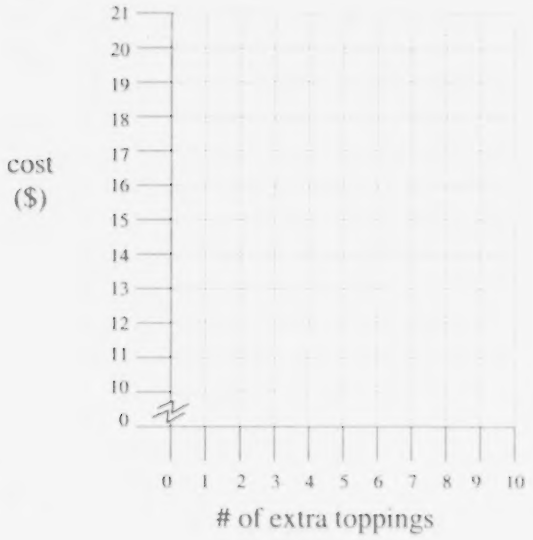
DO NOT USE

129

14. The menu at Pizza Palace shows the following costs:

A large tomato sauce cheese pizza with one extra topping costs $13.50. With two extra toppings, the cost is $15.00. With three extra toppings, the cost is $16.50.

A) Plot the cost versus the number of extra toppings on the graph.




B) Determine the cost per topping.

C) Express this partial variation as an equation, substituting the pizza information.

D) Determine the cost of a large pizza with no extra toppings.

# Investments

DO NOT USE

2 Marks

15. List four different investment options. 130

1 Mark

16. Explain the purpose of a Net Worth Statement. 131

2 Marks

DO NOT USE

132

17. Using the chart below:

A) State the name of the stock that costs the least to purchase.

B) Determine which stock dropped the most in dollar value from Wednesday, April 24 to Thursday, April 25.

C) State which stock did not change at all between Wednesday, April 24 and Thursday, April 25.

D) State the name of the stock represented by the symbol DMW.

| Thursday, April 25, 2002 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 365-day | | stock | sym | div | high | low | close | chg | vol 100s | yld | p/e ratio |
| high | low | | | | | | | | | | |
| 11.40 | 4.25 | Crisimar | CRS | | 9.25 | 9.05 | 9.05 | -0.05 | 82 | | |
| 46.10 | 17.25 | Croman | CRM | | 23.13 | 20.71 | 22.62 | -0.48 | 1 103 | | 11.0 |
| 3.45 | 1.10 | Crysdan | CRS | | 2.74 | 2.60 | 2.64 | -0.11 | 970 | | |
| 1.65 | 0.66 | Cydzil | CDZ | | 1.60 | 1.59 | 1.60 | | 77 | | |
| 0.24 | 0.10 | Cymbar | CMB | | 0.13 | 0.13 | 0.13 | -.005 | 200 | | |
| 1.85 | 0.20 | Dimwyl | DMW | | 0.34 | 0.27 | 0.31 | +0.04 | 623 | | |
| 3.98 | 1.37 | Dorvin | DRV | | 3.50 | 3.37 | 3.45 | +0.05 | 315 | | 24.6 |
| 5.50 | 2.40 | Dupplex | DPX | | 4.10 | 3.75 | 3.75 | -0.19 | 1 063 | | |
| 11.75 | 4.10 | Dylvar | DLR | | 10.45 | 10.25 | 10.45 | +0.35 | 141 | | 31.7 |
| 79.00 | 40.25 | Dummler | DUM | | 71.71 | 71.71 | 71.71 | +1.71 | 2 | 2.9 | |

2 Marks

DO NOT USE

18. There are four characteristics of investments: liquidity, risk, inflation risk and yield. Explain any 2 characteristics of investments.

133

DO NOT USE

DO NOT USE

# Senior 4 Consumer Mathematics (40S) Standards Test

## Written Test Resource Package

2003

Manitoba Education and Youth

# RULER

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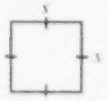
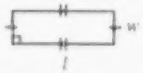
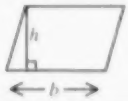
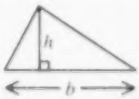
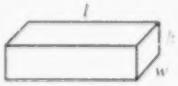
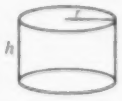
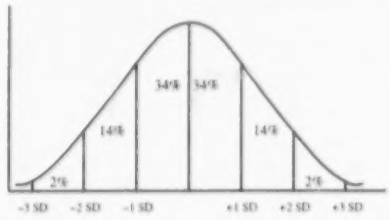
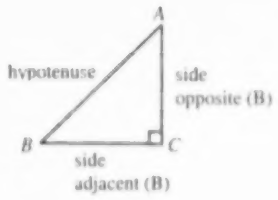
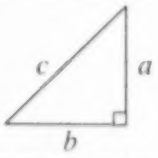
| Formula List | | |
|---|---|---|
| **Name of Formula** | **Diagram** | **Formula** |
| area of a square |  | $A = s^2$ |
| area of a rectangle |  | $A = lw$ |
| area of a parallelogram |  | $A = bh$ |
| area of a trapezoid | | $A = \frac{1}{2}(a + b)h$ |
| area of a triangle |  | $A = \frac{1}{2}bh$ |
| area of a circle | | $A = \pi r^2$ |

| | | |
|---|---|---|
| surface area of a rectangular solid |  | $SA = 2lw + 2lh + 2wh$ |
| volume of a rectangular solid | | $V = lwh$ |
| surface area of a sphere | | $SA = 4\pi r^2$ |
| volume of a sphere | | $V = \frac{4}{3}\pi r^3$ |
| surface area of a cone | | $SA = \pi rs + \pi r^2$ |
| volume of a cone | | $V = \frac{1}{3}\pi r^2 h$ |
| surface area of a cylinder |  | $SA = 2\pi rh + 2\pi r^2$ |
| volume of a cylinder | | $V = \pi r^2 h$ |
| surface area of a pyramid | | $SA = 2bs + b^2$ |
| volume of a pyramid | | $V = \frac{1}{3}b^2 h$ |

| Formula List | | |
|---|---|---|
| **Name of Formula** | **Diagram** | **Formula** |
| Normal Distribution |  | |
| Standard Deviation | $\sum$ = sum<br>$S$ = standard deviation<br>$x$ = observed score<br>$\bar{x}$ = mean<br>$n$ = total number of observations | $S = \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}}$ |
| Percentile Rank | $B$ = number of raw scores below the given score<br>$E$ = number of raw scores equal to the given score, including the given score<br>$n$ = total number of raw scores | $P = \left( \frac{B + 0.5E}{n} \right) \times 100$ |
| Direct Variation | $A$ = dependent variable<br>$k$ = constant of variation<br>$B$ = independent variable | $A = kB$ |
| Inverse Variation | $A$ = dependent variable<br>$k$ = constant of variation<br>$B$ = independent variable | $A = \frac{k}{B}$ |
| Partial Variation | $C$ = dependent variable<br>$k$ = constant of variation<br>$n$ = independent variable<br>F = fixed value | $C = F + kn$ |

| Formula List | | |
|---|---|---|
| **Name of Formula** | **Diagram** | **Formula** |
| trigonometric formulas for right-angled triangles |  | $\sin \angle B = \frac{\text{side opposite}}{\text{hypotenuse}}$<br>$\cos \angle B = \frac{\text{side adjacent}}{\text{hypotenuse}}$<br>$\tan \angle B = \frac{\text{side opposite}}{\text{side adjacent}}$ |
| Pythagorean Theorem for right triangles |  | $c^2 = a^2 + b^2$ |

| | | |
|---|---|---|
| Simple Interest | $P$ = principal<br>$r$ = annual interest rate<br>$t$ = time in years<br>$I$ = interest | $I = Prt$ |
| Compound Interest | $A$ = *final amount*<br>$P$ = *principal*<br>$r$ = *annual interest rate*<br>$n$ = *number of times a year interest is compounded*<br>$t$ = *time in years* | $A = P\left(1 + \frac{r}{n}\right)^{nt}$ |
| Debt Equity Ratio | | $\text{DER} = \frac{\text{Total Liabilities} - \text{Mortgage}}{\text{Net Worth}} \times 100 \,[= \%]$ |
| Net Worth | | Net Worth = Assets – Total Liabilities |
| Property Tax Rate | | $\text{PTR} = \frac{\text{Total Revenue Required}}{\text{Total Portioned Assessment}} \times 1000 \,[= \text{mills}]$ |

| | |
|---|---|
| Gasoline Tax | Gasoline: 11.5¢/L<br>Diesel Fuel: 10.9¢/L |
| Tobacco Taxes | per cigarette: 8¢<br>per carton (of 200 cigarettes): $16.00<br>loose tobacco: 5.3¢ per gram |

| | | |
|---|---|---|
| Temperature | $F$ = degrees Fahrenheit<br>$C$ = degrees Celsius | $F = \frac{9}{5}C + 32$<br>$C = \frac{5}{9}(F - 32)$ |

## Table 1: 10-Year Term Insurance

| | Term Plus | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male Non-Smoker | | | Female Non-Smoker | | | Male Smoker | | | Female Smoker | | |
| | Issue Rate per $1000 | | | Issue Rate per $1000 | | | Issue Rate per $1000 | | | Issue Rate per $1000 | | |
| AGE | $100 000 $249 999 | $250 000 $499 999 | $500 000 $3 000 000 | $100 000 $249 999 | $250 000 $499 999 | $500 000 $3 000 000 | $100 000 $249 999 | $250 000 $499 999 | $500 000 $3 000 000 | $100 000 $249 999 | $250 000 $499 999 | $500 000 $3 000 000 |
| 20 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 21 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 22 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 23 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 24 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 25 | 0.85 | 0.81 | 0.77 | 0.80 | 0.76 | 0.73 | 1.43 | 1.36 | 1.30 | 1.32 | 1.25 | 1.20 |
| 26 | 0.86 | 0.82 | 0.78 | 0.80 | 0.76 | 0.73 | 1.47 | 1.40 | 1.34 | 1.33 | 1.27 | 1.21 |
| 27 | 0.87 | 0.83 | 0.79 | 0.80 | 0.76 | 0.73 | 1.52 | 1.44 | 1.39 | 1.34 | 1.28 | 1.22 |
| 28 | 0.88 | 0.84 | 0.80 | 0.80 | 0.76 | 0.73 | 1.56 | 1.49 | 1.42 | 1.35 | 1.29 | 1.23 |
| 29 | 0.89 | 0.85 | 0.81 | 0.80 | 0.76 | 0.73 | 1.61 | 1.53 | 1.46 | 1.36 | 1.30 | 1.24 |
| 30 | 0.90 | 0.86 | 0.82 | 0.80 | 0.76 | 0.73 | 1.65 | 1.57 | 1.51 | 1.38 | 1.31 | 1.25 |
| 31 | 0.96 | 0.91 | 0.87 | 0.86 | 0.82 | 0.78 | 1.78 | 1.69 | 1.62 | 1.47 | 1.40 | 1.34 |
| 32 | 1.02 | 0.97 | 0.93 | 0.92 | 0.87 | 0.84 | 1.91 | 1.82 | 1.74 | 1.57 | 1.50 | 1.43 |
| 33 | 1.08 | 1.03 | 0.98 | 0.98 | 0.93 | 0.89 | 2.05 | 1.95 | 1.86 | 1.67 | 1.58 | 1.52 |
| 34 | 1.14 | 1.08 | 1.04 | 1.04 | 0.99 | 0.95 | 2.18 | 2.07 | 1.98 | 1.77 | 1.68 | 1.62 |
| 35 | 1.20 | 1.14 | 1.09 | 1.10 | 1.05 | 1.00 | 2.31 | 2.20 | 2.10 | 1.87 | 1.78 | 1.71 |
| 36 | 1.34 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 2.60 | 2.46 | 2.37 | 2.02 | 1.93 | 1.84 |
| 37 | 1.48 | 1.41 | 1.35 | 1.24 | 1.18 | 1.13 | 2.88 | 2.74 | 2.62 | 2.18 | 2.07 | 1.98 |
| 38 | 1.62 | 1.54 | 1.47 | 1.31 | 1.24 | 1.19 | 3.17 | 3.01 | 2.88 | 2.33 | 2.21 | 2.12 |
| 39 | 1.76 | 1.67 | 1.60 | 1.38 | 1.31 | 1.26 | 3.45 | 3.28 | 3.15 | 2.49 | 2.37 | 2.27 |
| 40 | 1.90 | 1.81 | 1.73 | 1.45 | 1.38 | 1.32 | 3.74 | 3.55 | 3.40 | 2.64 | 2.51 | 2.40 |
| 41 | 2.06 | 1.96 | 1.87 | 1.56 | 1.48 | 1.42 | 4.22 | 4.02 | 3.84 | 2.90 | 2.76 | 2.64 |
| 42 | 2.22 | 2.11 | 2.02 | 1.67 | 1.59 | 1.52 | 4.71 | 4.48 | 4.28 | 3.17 | 3.01 | 2.88 |
| 43 | 2.38 | 2.26 | 2.17 | 1.78 | 1.69 | 1.62 | 5.19 | 4.93 | 4.73 | 3.43 | 3.26 | 3.12 |
| 44 | 2.54 | 2.41 | 2.31 | 1.89 | 1.80 | 1.72 | 5.68 | 5.39 | 5.17 | 3.70 | 3.51 | 3.37 |
| 45 | 2.70 | 2.57 | 2.46 | 2.00 | 1.90 | 1.82 | 6.16 | 5.85 | 5.61 | 3.96 | 3.76 | 3.61 |
| 46 | 3.03 | 2.88 | 2.76 | 2.23 | 2.12 | 2.03 | 6.60 | 6.27 | 6.01 | 4.49 | 4.27 | 4.08 |
| 47 | 3.36 | 3.19 | 3.06 | 2.46 | 2.34 | 2.24 | 7.04 | 6.69 | 6.40 | 5.02 | 4.76 | 4.57 |
| 48 | 3.69 | 3.51 | 3.36 | 2.69 | 2.56 | 2.45 | 7.48 | 7.11 | 6.81 | 5.54 | 5.27 | 5.05 |
| 49 | 4.02 | 3.82 | 3.66 | 2.92 | 2.77 | 2.66 | 7.92 | 7.52 | 7.21 | 6.07 | 5.76 | 5.52 |
| 50 | 4.35 | 4.13 | 3.96 | 3.15 | 2.99 | 2.87 | 8.36 | 7.94 | 7.61 | 6.60 | 6.27 | 6.01 |
| 51 | 4.88 | 4.64 | 4.44 | 3.40 | 3.23 | 3.09 | 9.26 | 8.80 | 8.43 | 7.24 | 6.88 | 6.59 |
| 52 | 5.41 | 5.14 | 4.92 | 3.65 | 3.47 | 3.32 | 10.16 | 9.66 | 9.25 | 7.88 | 7.48 | 7.17 |
| 53 | 5.94 | 5.64 | 5.41 | 3.90 | 3.71 | 3.55 | 11.07 | 10.52 | 10.07 | 8.51 | 8.09 | 7.74 |
| 54 | 6.47 | 6.15 | 5.89 | 4.15 | 3.94 | 3.78 | 11.97 | 11.37 | 10.89 | 9.15 | 8.69 | 8.33 |
| 55 | 7.00 | 6.65 | 6.37 | 4.40 | 4.18 | 4.00 | 12.87 | 12.23 | 11.72 | 9.79 | 9.31 | 8.91 |
| 56 | 7.60 | 7.22 | 6.92 | 4.91 | 4.66 | 4.47 | 13.60 | 12.91 | 12.38 | 10.52 | 9.99 | 9.57 |
| 57 | 8.20 | 7.79 | 7.46 | 5.42 | 5.15 | 4.93 | 14.32 | 13.61 | 13.04 | 11.24 | 10.68 | 10.23 |
| 58 | 8.80 | 8.36 | 8.01 | 5.93 | 5.63 | 5.40 | 15.05 | 14.30 | 13.70 | 11.97 | 11.37 | 10.89 |
| 59 | 9.40 | 8.93 | 8.55 | 6.44 | 6.12 | 5.86 | 15.77 | 14.98 | 14.36 | 12.69 | 12.06 | 11.55 |
| 60 | 10.00 | 9.50 | 9.10 | 6.95 | 6.60 | 6.32 | 16.50 | 15.68 | 15.02 | 13.42 | 12.75 | 12.21 |
| 61 | 11.60 | 11.02 | 10.56 | 7.86 | 7.47 | 7.15 | 18.70 | 17.77 | 17.02 | 14.87 | 14.12 | 13.53 |
| 62 | 13.20 | 12.54 | 12.01 | 8.77 | 8.33 | 7.98 | 20.90 | 19.86 | 19.02 | 16.32 | 15.51 | 14.85 |
| 63 | 14.80 | 14.06 | 13.47 | 9.68 | 9.20 | 8.81 | 23.10 | 21.95 | 21.02 | 17.78 | 16.89 | 16.18 |
| 64 | 16.40 | 15.58 | 14.92 | 10.59 | 10.06 | 9.64 | 25.30 | 24.04 | 23.02 | 19.23 | 18.27 | 17.50 |
| 65 | 18.00 | 17.10 | 16.38 | 11.50 | 10.93 | 10.47 | 27.50 | 26.13 | 25.03 | 20.68 | 19.65 | 18.82 |
| 66 | 19.60 | 18.62 | 17.84 | 12.41 | 11.79 | 11.29 | 29.70 | 28.22 | 27.03 | 22.13 | 21.02 | 20.14 |
| 67 | 21.10 | 21.14 | 19.29 | 13.32 | 12.65 | 12.12 | 31.90 | 30.31 | 29.03 | 23.58 | 22.41 | 21.46 |
| 68 | 22.80 | 21.66 | 20.75 | 14.23 | 13.52 | 12.95 | 34.10 | 32.40 | 31.03 | 25.04 | 23.78 | 22.78 |
| 69 | 24.40 | 23.18 | 22.20 | 15.14 | 14.38 | 13.78 | 36.30 | 34.49 | 33.03 | 26.49 | 25.17 | 24.10 |
| 70 | 26.00 | 24.70 | 23.66 | 16.05 | 15.25 | 14.61 | 38.50 | 36.58 | 35.04 | 27.94 | 26.54 | 25.42 |
| 71 | 27.60 | 26.22 | 25.12 | 16.96 | 16.11 | 15.43 | 40.70 | 38.67 | 37.04 | 29.39 | 27.92 | 26.75 |
| 72 | 29.20 | 27.74 | 26.57 | 17.87 | 16.98 | 16.26 | 42.90 | 40.76 | 39.04 | 30.84 | 29.30 | 28.07 |
| 73 | 30.80 | 29.26 | 28.03 | 18.78 | 17.84 | 17.09 | 45.10 | 42.85 | 41.04 | 32.30 | 30.68 | 29.39 |
| 74 | 32.40 | 30.78 | 29.48 | 19.69 | 18.71 | 17.92 | 47.30 | 44.94 | 43.04 | 33.75 | 32.07 | 30.71 |

**Add policy fee of $75 per year**
**Semi-annual payment (multiply annual premium by 0.52)**
**Monthly payment (multiply annual premium by 0.09)**

## Table 2: Whole-Life Insurance

**WHOLE-LIFE**

| Issue Age | Male Non-Smoker<br>Issue Rate Per $1000<br>Premium Rate | Female Non-Smoker<br>Issue Rate Per $1000<br>Premium Rate | Male Smoker<br>Issue Rate Per $1000<br>Premium Rate | Female Smoker<br>Issue Rate Per $1000<br>Premium Rate | Issue Age |
|---|---|---|---|---|---|
| 18 | 3.50 | 2.82 | 4.31 | 3.13 | 18 |
| 19 | 3.54 | 2.85 | 4.41 | 3.20 | 19 |
| 20 | 3.60 | 2.89 | 4.51 | 3.26 | 20 |
| 21 | 3.96 | 3.04 | 4.72 | 3.44 | 21 |
| 22 | 4.07 | 3.20 | 4.93 | 3.62 | 22 |
| 23 | 4.17 | 3.35 | 5.15 | 3.81 | 23 |
| 24 | 4.28 | 3.51 | 5.36 | 3.99 | 24 |
| 25 | 4.38 | 3.66 | 5.57 | 4.17 | 25 |
| 26 | 4.61 | 3.86 | 5.88 | 4.41 | 26 |
| 27 | 4.82 | 4.05 | 6.19 | 4.66 | 27 |
| 28 | 5.05 | 4.25 | 6.49 | 4.90 | 28 |
| 29 | 5.26 | 4.44 | 6.80 | 5.15 | 29 |
| 30 | 5.46 | 4.64 | 7.11 | 5.39 | 30 |
| 31 | 5.76 | 4.90 | 7.56 | 5.72 | 31 |
| 32 | 6.03 | 5.16 | 8.01 | 6.04 | 32 |
| 33 | 6.30 | 5.41 | 8.45 | 6.37 | 33 |
| 34 | 6.59 | 5.67 | 8.90 | 6.69 | 34 |
| 35 | 7.11 | 5.93 | 9.35 | 7.02 | 35 |
| 36 | 7.32 | 6.31 | 10.04 | 7.50 | 36 |
| 37 | 7.78 | 6.70 | 10.74 | 7.98 | 37 |
| 38 | 8.25 | 7.08 | 11.43 | 8.47 | 38 |
| 39 | 8.71 | 7.47 | 12.13 | 8.95 | 39 |
| 40 | 9.28 | 7.85 | 12.82 | 9.43 | 40 |
| 41 | 9.75 | 8.42 | 13.86 | 10.14 | 41 |
| 42 | 10.32 | 8.99 | 14.90 | 10.85 | 42 |
| 43 | 10.90 | 9.55 | 15.95 | 11.55 | 43 |
| 44 | 11.48 | 10.12 | 16.99 | 12.26 | 44 |
| 45 | 12.40 | 10.69 | 18.03 | 12.97 | 45 |
| 46 | 12.81 | 11.21 | 19.15 | 13.68 | 46 |
| 47 | 13.55 | 11.73 | 20.28 | 14.38 | 47 |
| 48 | 14.28 | 12.26 | 21.38 | 15.09 | 48 |
| 49 | 15.02 | 12.78 | 22.49 | 15.79 | 49 |
| 50 | 16.34 | 13.30 | 23.61 | 16.50 | 50 |
| 51 | 16.70 | 14.03 | 25.06 | 17.44 | 51 |
| 52 | 17.63 | 14.76 | 26.52 | 18.38 | 52 |
| 53 | 18.56 | 15.49 | 27.97 | 19.32 | 53 |
| 54 | 19.51 | 16.22 | 29.43 | 20.26 | 54 |
| 55 | 21.15 | 16.95 | 30.88 | 21.20 | 55 |
| 56 | 21.79 | 17.93 | 32.73 | 22.39 | 56 |
| 57 | 23.17 | 18.91 | 34.57 | 23.58 | 57 |
| 58 | 24.53 | 19.89 | 36.42 | 24.78 | 58 |
| 59 | 25.89 | 20.87 | 38.26 | 25.97 | 59 |
| 60 | 27.70 | 21.85 | 40.11 | 27.16 | 60 |
| 61 | 29.32 | 23.21 | 42.40 | 28.71 | 61 |
| 62 | 31.39 | 24.57 | 44.70 | 30.25 | 62 |
| 63 | 33.45 | 25.93 | 46.99 | 31.80 | 63 |
| 64 | 35.52 | 27.29 | 49.29 | 33.34 | 64 |
| 65 | 37.58 | 28.65 | 51.58 | 34.89 | 65 |
| 66 | 39.73 | 30.08 | 54.48 | 36.29 | 66 |
| 67 | 41.95 | 31.59 | 56.60 | 37.74 | 67 |
| 68 | 44.33 | 33.17 | 58.81 | 39.25 | 68 |
| 69 | 46.83 | 34.82 | 61.12 | 40.82 | 69 |
| 70 | 49.45 | 36.57 | 63.51 | 42.45 | 70 |
| 71 | 52.22 | 38.39 | 65.96 | 44.15 | 71 |
| 72 | 55.15 | 40.31 | 68.56 | 45.91 | 72 |
| 73 | 58.23 | 42.33 | 71.23 | 47.75 | 73 |
| 74 | 61.50 | 44.45 | 74.01 | 49.66 | 74 |
| 75 | 64.94 | 46.67 | 76.89 | 51.65 | 75 |

| Issue Age | Male Under 18<br>Issue Rate Per $1000<br>Premium Rate | Female Under 18<br>Issue Rate Per $1000<br>Premium Rate | Issue Age |
|---|---|---|---|
| 0 | 1.75 | 1.53 | 0 |
| 1 | 1.78 | 1.56 | 1 |
| 2 | 1.80 | 1.59 | 2 |
| 3 | 1.89 | 1.63 | 3 |
| 4 | 1.98 | 1.67 | 4 |
| 5 | 2.05 | 1.71 | 5 |
| 6 | 2.12 | 1.75 | 6 |
| 7 | 2.24 | 1.82 | 7 |
| 8 | 2.35 | 1.89 | 8 |
| 9 | 2.47 | 1.97 | 9 |
| 10 | 2.58 | 2.05 | 10 |
| 11 | 2.71 | 2.16 | 11 |
| 12 | 2.83 | 2.27 | 12 |
| 13 | 3.01 | 2.34 | 13 |
| 14 | 3.19 | 2.41 | 14 |
| 15 | 3.31 | 2.50 | 15 |
| 16 | 3.42 | 2.58 | 16 |
| 17 | 3.48 | 2.68 | 17 |

**Add policy fee of $75.00 per year.**

Semi-annual payment (multiply annual premium by 0.52)
Monthly payment (multiply annual premium by 0.09)

# Table 3: Cash Surrender Values

WHOLE-LIFE

| MALE Cash Surrender Value per $1000 of Sum Assured — Issue Age | | | | | | | | | | | Policy | FEMALE Cash Surrender Value per $1000 of Sum Assured — Issue Age | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | Year | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 2 | 3 | 5 | 7 | 9 | 11 | 15 | 18 | 4 | 1 | 1 | 1 | 1 | 2 | 4 | 5 | 7 | 9 | 12 | 16 |
| 2 | 3 | 4 | 6 | 8 | 14 | 18 | 23 | 28 | 35 | 41 | 5 | 1 | 2 | 3 | 5 | 7 | 11 | 14 | 19 | 24 | 30 | 37 |
| 4 | 6 | 8 | 11 | 14 | 23 | 29 | 36 | 44 | 54 | 64 | 6 | 3 | 4 | 6 | 8 | 11 | 18 | 23 | 30 | 38 | 48 | 58 |
| 6 | 8 | 11 | 15 | 20 | 32 | 40 | 50 | 61 | 74 | 87 | 7 | 4 | 6 | 9 | 12 | 16 | 25 | 33 | 42 | 52 | 65 | 79 |
| 7 | 10 | 14 | 19 | 25 | 40 | 51 | 64 | 78 | 94 | 110 | 8 | 6 | 8 | 11 | 15 | 20 | 32 | 42 | 53 | 67 | 83 | 100 |
| 8 | 13 | 18 | 24 | 30 | 49 | 62 | 77 | 94 | 113 | 133 | 9 | 7 | 10 | 14 | 19 | 24 | 40 | 51 | 65 | 81 | 100 | 121 |
| 10 | 15 | 21 | 28 | 36 | 58 | 73 | 91 | 111 | 133 | 156 | 10 | 9 | 12 | 16 | 22 | 29 | 47 | 60 | 76 | 95 | 118 | 142 |
| 14 | 21 | 29 | 38 | 52 | 91 | 109 | 130 | 152 | 175 | 201 | 11 | 12 | 17 | 23 | 30 | 42 | 75 | 91 | 111 | 133 | 158 | 186 |
| 17 | 27 | 37 | 48 | 68 | 124 | 145 | 168 | 193 | 218 | 245 | 12 | 15 | 22 | 29 | 38 | 55 | 103 | 122 | 146 | 171 | 199 | 231 |
| 21 | 34 | 44 | 58 | 83 | 157 | 181 | 207 | 234 | 260 | 290 | 13 | 18 | 27 | 36 | 46 | 68 | 131 | 154 | 181 | 208 | 239 | 275 |
| 24 | 40 | 52 | 68 | 99 | 190 | 217 | 246 | 275 | 303 | 335 | 14 | 20 | 32 | 42 | 55 | 81 | 160 | 185 | 216 | 246 | 280 | 319 |
| 28 | 46 | 60 | 78 | 115 | 223 | 252 | 284 | 316 | 345 | 380 | 15 | 23 | 37 | 49 | 63 | 94 | 188 | 216 | 251 | 284 | 320 | 364 |
| 33 | 54 | 73 | 94 | 141 | 256 | 288 | 323 | 356 | 387 | 424 | 16 | 28 | 44 | 59 | 76 | 116 | 216 | 247 | 285 | 321 | 361 | 408 |
| 39 | 62 | 86 | 110 | 167 | 289 | 324 | 362 | 397 | 430 | 469 | 17 | 32 | 50 | 70 | 89 | 138 | 244 | 278 | 320 | 359 | 401 | 453 |
| 44 | 69 | 99 | 126 | 193 | 322 | 360 | 401 | 438 | 472 | 514 | 18 | 37 | 56 | 80 | 103 | 159 | 273 | 310 | 355 | 397 | 442 | 497 |
| 50 | 77 | 112 | 142 | 219 | 355 | 396 | 439 | 479 | 515 | 558 | 19 | 41 | 63 | 91 | 116 | 181 | 301 | 341 | 390 | 434 | 482 | 542 |
| 55 | 85 | 125 | 158 | 245 | 388 | 432 | 478 | 520 | 557 | 603 | 20 | 46 | 69 | 102 | 129 | 203 | 329 | 372 | 425 | 472 | 523 | 586 |
| 63 | 96 | 140 | 181 | 284 | 405 | 451 | 499 | 544 | 587 | 626 | 21 | 52 | 78 | 114 | 149 | 237 | 348 | 393 | 448 | 498 | 555 | 627 |
| 71 | 107 | 154 | 204 | 324 | 423 | 470 | 520 | 568 | 616 | 650 | 22 | 59 | 87 | 126 | 168 | 272 | 367 | 414 | 471 | 525 | 587 | 669 |
| 78 | 117 | 169 | 226 | 363 | 440 | 489 | 541 | 592 | 645 | 673 | 23 | 65 | 96 | 138 | 188 | 306 | 387 | 435 | 494 | 551 | 618 | 710 |
| 86 | 128 | 183 | 249 | 403 | 458 | 508 | 562 | 616 | 675 | 698 | 24 | 71 | 105 | 151 | 207 | 341 | 406 | 456 | 517 | 578 | 650 | 752 |
| 94 | 139 | 198 | 272 | 442 | 475 | 527 | 582 | 640 | 705 | 726 | 25 | 78 | 114 | 163 | 226 | 375 | 425 | 477 | 540 | 604 | 682 | 793 |
| 105 | 154 | 217 | 312 | 458 | 493 | 546 | 603 | 664 | 734 | 756 | 26 | 87 | 126 | 179 | 262 | 393 | 444 | 498 | 563 | 630 | 714 | 834 |
| 116 | 168 | 236 | 353 | 474 | 510 | 565 | 624 | 688 | 764 | 794 | 27 | 96 | 139 | 195 | 297 | 411 | 463 | 519 | 586 | 657 | 746 | 876 |
| 127 | 183 | 254 | 393 | 490 | 528 | 583 | 645 | 712 | 793 | 841 | 28 | 105 | 151 | 212 | 332 | 429 | 482 | 539 | 609 | 683 | 777 | 917 |
| 138 | 197 | 273 | 434 | 506 | 545 | 602 | 666 | 736 | 823 | 906 | 29 | 114 | 163 | 228 | 367 | 446 | 502 | 560 | 632 | 710 | 809 | 959 |
| 149 | 212 | 292 | 474 | 522 | 563 | 621 | 687 | 760 | 852 | 1000 | 30 | 124 | 176 | 244 | 402 | 464 | 521 | 581 | 655 | 736 | 841 | 1000 |
| 164 | 231 | 333 | 489 | 538 | 580 | 640 | 708 | 784 | 882 | - | 31 | 136 | 192 | 276 | 419 | 482 | 540 | 602 | 678 | 762 | 873 | - |
| 179 | 250 | 374 | 504 | 554 | 598 | 659 | 729 | 808 | 911 | - | 32 | 149 | 209 | 308 | 436 | 500 | 559 | 623 | 701 | 789 | 905 | - |
| 193 | 269 | 415 | 519 | 570 | 615 | 678 | 749 | 832 | 941 | - | 33 | 161 | 225 | 340 | 453 | 518 | 578 | 644 | 724 | 815 | 936 | - |
| 208 | 288 | 456 | 534 | 585 | 633 | 697 | 770 | 856 | 970 | - | 34 | 174 | 241 | 372 | 470 | 536 | 597 | 665 | 747 | 842 | 968 | - |
| 223 | 307 | 497 | 549 | 601 | 650 | 716 | 791 | 880 | 1000 | - | 35 | 186 | 258 | 404 | 487 | 554 | 617 | 686 | 770 | 868 | 1000 | - |
| 242 | 348 | 511 | 564 | 617 | 668 | 735 | 812 | 904 | - | - | 36 | 202 | 287 | 421 | 505 | 571 | 636 | 707 | 798 | 894 | - | - |
| 261 | 389 | 526 | 579 | 633 | 685 | 754 | 833 | 928 | - | - | 37 | 219 | 316 | 438 | 522 | 589 | 655 | 728 | 816 | 921 | - | - |
| 280 | 429 | 540 | 594 | 649 | 703 | 773 | 854 | 952 | - | - | 38 | 235 | 345 | 455 | 539 | 607 | 674 | 749 | 839 | 947 | - | - |
| 299 | 470 | 554 | 609 | 665 | 720 | 792 | 875 | 976 | - | - | 39 | 252 | 375 | 472 | 556 | 625 | 693 | 770 | 862 | 974 | - | - |
| 318 | 511 | 589 | 624 | 681 | 738 | 811 | 896 | 1000 | - | - | 40 | 268 | 404 | 489 | 573 | 643 | 712 | 791 | 885 | 1000 | - | - |
| 357 | 525 | 583 | 639 | 697 | 755 | 830 | 916 | - | - | - | 41 | 295 | 421 | 506 | 590 | 661 | 732 | 812 | 908 | - | - | - |
| 395 | 539 | 598 | 654 | 713 | 773 | 849 | 937 | - | - | - | 42 | 322 | 438 | 523 | 607 | 679 | 751 | 833 | 931 | - | - | - |
| 434 | 553 | 612 | 669 | 729 | 790 | 867 | 958 | - | - | - | 43 | 350 | 455 | 540 | 624 | 696 | 770 | 853 | 954 | - | - | - |
| 472 | 567 | 626 | 684 | 745 | 808 | 886 | 979 | - | - | - | 44 | 377 | 472 | 557 | 641 | 714 | 789 | 874 | 977 | - | - | - |
| 511 | 581 | 641 | 699 | 761 | 825 | 905 | 1000 | - | - | - | 45 | 404 | 489 | 574 | 658 | 732 | 808 | 895 | 1000 | - | - | - |
| 525 | 595 | 655 | 714 | 777 | 843 | 924 | - | - | - | - | 46 | 421 | 506 | 591 | 675 | 750 | 827 | 916 | - | - | - | - |
| 539 | 609 | 669 | 729 | 793 | 860 | 943 | - | - | - | - | 47 | 438 | 523 | 608 | 692 | 768 | 847 | 937 | - | - | - | - |
| 553 | 623 | 684 | 745 | 809 | 878 | 962 | - | - | - | - | 48 | 455 | 540 | 625 | 710 | 786 | 866 | 958 | - | - | - | - |
| 567 | 637 | 698 | 760 | 825 | 895 | 981 | - | - | - | - | 49 | 472 | 557 | 642 | 727 | 804 | 885 | 979 | - | - | - | - |
| 581 | 651 | 713 | 775 | 841 | 913 | 1000 | - | - | - | - | 50 | 489 | 574 | 659 | 744 | 821 | 904 | 1000 | - | - | - | - |
| 595 | 665 | 727 | 790 | 857 | 930 | - | - | - | - | - | 51 | 506 | 591 | 676 | 761 | 839 | 923 | - | - | - | - | - |
| 609 | 679 | 741 | 805 | 872 | 948 | - | - | - | - | - | 52 | 523 | 608 | 693 | 778 | 857 | 942 | - | - | - | - | - |
| 623 | 693 | 756 | 820 | 888 | 965 | - | - | - | - | - | 53 | 540 | 625 | 711 | 795 | 875 | 962 | - | - | - | - | - |
| 637 | 707 | 770 | 835 | 904 | 983 | - | - | - | - | - | 54 | 557 | 642 | 728 | 812 | 893 | 981 | - | - | - | - | - |
| 651 | 721 | 784 | 850 | 920 | 1000 | - | - | - | - | - | 55 | 574 | 659 | 745 | 829 | 911 | 1000 | - | - | - | - | - |
| 665 | 735 | 799 | 865 | 936 | - | - | - | - | - | - | 56 | 591 | 676 | 762 | 846 | 929 | - | - | - | - | - | - |
| 679 | 749 | 813 | 880 | 952 | - | - | - | - | - | - | 57 | 608 | 693 | 779 | 863 | 946 | - | - | - | - | - | - |
| 693 | 762 | 828 | 895 | 968 | - | - | - | - | - | - | 58 | 625 | 711 | 796 | 880 | 964 | - | - | - | - | - | - |
| 707 | 776 | 842 | 910 | 984 | - | - | - | - | - | - | 59 | 642 | 728 | 813 | 897 | 982 | - | - | - | - | - | - |
| 721 | 790 | 856 | 925 | 1000 | - | - | - | - | - | - | 60 | 659 | 745 | 830 | 915 | 1000 | - | - | - | - | - | - |
| 735 | 804 | 871 | 940 | - | - | - | - | - | - | - | 61 | 676 | 762 | 847 | 932 | - | - | - | - | - | - | - |
| 749 | 818 | 885 | 955 | - | - | - | - | - | - | - | 62 | 693 | 779 | 864 | 949 | - | - | - | - | - | - | - |
| 762 | 832 | 899 | 970 | - | - | - | - | - | - | - | 63 | 711 | 796 | 881 | 966 | - | - | - | - | - | - | - |
| 776 | 846 | 914 | 985 | - | - | - | - | - | - | - | 64 | 728 | 813 | 898 | 983 | - | - | - | - | - | - | - |
| 790 | 860 | 928 | 1000 | - | - | - | - | - | - | - | 65 | 745 | 830 | 915 | 1000 | - | - | - | - | - | - | - |
| 804 | 874 | 943 | - | - | - | - | - | - | - | - | 66 | 762 | 847 | 932 | - | - | - | - | - | - | - | - |
| 818 | 888 | 957 | - | - | - | - | - | - | - | - | 67 | 779 | 864 | 949 | - | - | - | - | - | - | - | - |
| 832 | 902 | 971 | - | - | - | - | - | - | - | - | 68 | 796 | 881 | 966 | - | - | - | - | - | - | - | - |
| 846 | 916 | 986 | - | - | - | - | - | - | - | - | 69 | 813 | 898 | 983 | - | - | - | - | - | - | - | - |
| 860 | 930 | 1000 | - | - | - | - | - | - | - | - | 70 | 830 | 915 | 1000 | - | - | - | - | - | - | - | - |
| 874 | 944 | - | - | - | - | - | - | - | - | - | 71 | 847 | 932 | - | - | - | - | - | - | - | - | - |
| 888 | 958 | - | - | - | - | - | - | - | - | - | 72 | 864 | 949 | - | - | - | - | - | - | - | - | - |
| 902 | 972 | - | - | - | - | - | - | - | - | - | 73 | 881 | 966 | - | - | - | - | - | - | - | - | - |
| 916 | 986 | - | - | - | - | - | - | - | - | - | 74 | 898 | 983 | - | - | - | - | - | - | - | - | - |
| 930 | 1000 | - | - | - | - | - | - | - | - | - | 75 | 915 | 1000 | - | - | - | - | - | - | - | - | - |
| 944 | - | - | - | - | - | - | - | - | - | - | 76 | 932 | - | - | - | - | - | - | - | - | - | - |
| 958 | - | - | - | - | - | - | - | - | - | - | 77 | 949 | - | - | - | - | - | - | - | - | - | - |
| 972 | - | - | - | - | - | - | - | - | - | - | 78 | 966 | - | - | - | - | - | - | - | - | - | - |
| 986 | - | - | - | - | - | - | - | - | - | - | 79 | 983 | - | - | - | - | - | - | - | - | - | - |
| 1000 | - | - | - | - | - | - | - | - | - | - | 80 | 1000 | - | - | - | - | - | - | - | - | - | - |

*Every effort has been made to ensure the accuracy of the above values, but accuracy is not guaranteed. In the event of a discrepancy, the insurance policy governs.*

## Table 4: Tenant's Package Policy

| Tenant's Package Policy ($500 deductible) | | |
|---|---|---|
| All Areas – Manitoba | | |
| **Coverage Amount** | **Standard Form** | **Comprehensive Form** |
| $25 000 | $158.00 | $200.00 |
| $30 000 | $174.00 | $226.00 |
| $35 000 | $199.00 | $252.00 |
| $40 000 | $212.00 | $269.00 |
| $45 000 | $235.00 | $298.00 |
| $50 000 | $254.00 | $324.00 |
| $55 000 | $272.00 | $346.00 |
| $60 000 | $293.00 | $373.00 |
| $65 000 | $315.00 | $400.00 |
| $70 000 | $337.00 | $427.00 |
| $75 000 | $359.00 | $454.00 |
| Each additional $1000 | $4.50 | $5.50 |

**$200 deductible – Increase premium by 10%**

## Table 5: Manitoba Homeowner's Insurance Rates

| Manitoba Homeowner's Insurance Rates ($500 deductible) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Boeckh Calculator | Metro Winnipeg | | Area 2 | | Area 3 | | Area 4 | |
| Amount | Standard | Comprehensive | Standard | Comprehensive | Standard | Comprehensive | Standard | Comprehensive |
| $ 50 000 | 195 | 214 | 147 | 161 | 196 | 216 | 261 | 287 |
| $ 55 000 | 216 | 238 | 160 | 176 | 217 | 239 | 289 | 318 |
| $ 60 000 | 237 | 260 | 173 | 190 | 237 | 261 | 315 | 347 |
| $ 65 000 | 252 | 277 | 187 | 205 | 255 | 281 | 339 | 373 |
| $ 70 000 | 266 | 303 | 200 | 220 | 270 | 297 | 359 | 395 |
| $ 75 000 | 294 | 314 | 210 | 231 | 285 | 314 | 379 | 417 |
| $ 80 000 | 310 | 323 | 221 | 243 | 302 | 332 | 402 | 462 |
| $ 85 000 | 318 | 333 | 226 | 249 | 313 | 344 | 416 | 458 |
| $ 90 000 | 324 | 349 | 231 | 254 | 324 | 356 | 431 | 474 |
| $ 95 000 | 348 | 370 | 244 | 268 | 345 | 380 | 459 | 505 |
| $100 000 | 364 | 393 | 260 | 286 | 361 | 397 | 480 | 528 |
| $105 000 | 390 | 417 | 278 | 306 | 378 | 416 | 503 | 553 |
| $110 000 | 402 | 441 | 293 | 322 | 393 | 432 | 523 | 575 |
| $115 000 | 418 | 464 | 299 | 329 | 409 | 450 | 544 | 598 |
| $120 000 | 436 | 487 | 309 | 340 | 424 | 466 | 564 | 620 |
| $125 000 | 451 | 510 | 319 | 351 | 444 | 488 | 591 | 650 |
| $130 000 | 472 | 543 | 339 | 373 | 466 | 513 | 620 | 682 |
| $135 000 | 498 | 557 | 345 | 380 | 477 | 525 | 634 | 697 |
| $140 000 | 523 | 580 | 358 | 394 | 496 | 546 | 660 | 726 |
| $145 000 | 538 | 596 | 375 | 413 | 508 | 559 | 676 | 744 |
| $150 000 | 550 | 604 | 385 | 424 | 520 | 572 | 692 | 761 |
| $155 000 | 557 | 613 | 398 | 438 | 551 | 606 | 733 | 806 |
| $160 000 | 565 | 622 | 413 | 454 | 569 | 626 | 757 | 833 |
| $165 000 | 572 | 629 | 425 | 468 | 589 | 648 | 783 | 861 |
| $170 000 | 590 | 647 | 441 | 485 | 609 | 670 | 810 | 891 |
| $175 000 | 607 | 668 | 451 | 496 | 624 | 686 | 830 | 913 |
| $180 000 | 620 | 686 | 466 | 513 | 648 | 713 | 862 | 948 |
| $185 000 | 636 | 702 | 478 | 526 | 667 | 734 | 887 | 976 |
| $190 000 | 652 | 717 | 492 | 541 | 705 | 776 | 938 | 1032 |
| $195 000 | 678 | 742 | 504 | 554 | 720 | 792 | 958 | 1054 |
| $200 000 | 692 | 771 | 519 | 571 | 726 | 799 | 966 | 1063 |
| Additional Amounts per $1000 coverage | Add: $3.15 | Add: $3.50 | Add: $2.75 | Add: $3.03 | Add: $3.55 | Add: $3.91 | Add: $4.72 | Add: $5.19 |

**$200 deductible – Increase premium by 10%**

## Table 6: Amortization Period of Mortgage Loan

| Amortization Period of Mortgage Loan (Blended payment of principal and interest per $1000 of loan) | | | | | |
|---|---|---|---|---|---|
| **Interest Rate** | **5 years** | **10 years** | **15 years** | **20 years** | **25 years** |
| 4.00% | $18.40 | $10.11 | $7.38 | $6.04 | $5.26 |
| 4.25% | 18.51 | 10.23 | 7.50 | 6.17 | 5.40 |
| 4.50% | 18.62 | 10.34 | 7.63 | 6.30 | 5.53 |
| 4.75% | 18.74 | 10.46 | 7.75 | 6.44 | 5.67 |
| 5.00% | 18.85 | 10.58 | 7.88 | 6.57 | 5.82 |
| 5.25% | 18.96 | 10.70 | 8.01 | 6.71 | 5.96 |
| 5.50% | 19.07 | 10.82 | 8.14 | 6.84 | 6.10 |
| 5.75% | 19.19 | 10.94 | 8.27 | 6.98 | 6.25 |
| 6.00% | 19.30 | 11.07 | 8.40 | 7.12 | 6.40 |
| 6.25% | 19.41 | 11.19 | 8.53 | 7.26 | 6.55 |
| 6.50% | 19.53 | 11.31 | 8.66 | 7.41 | 6.70 |
| 6.75% | 19.64 | 11.43 | 8.80 | 7.55 | 6.85 |
| 7.00% | 19.75 | 11.56 | 8.93 | 7.70 | 7.00 |
| 7.25% | 19.87 | 11.68 | 9.07 | 7.84 | 7.16 |
| 7.50% | 19.98 | 11.81 | 9.21 | 7.99 | 7.32 |
| 7.75% | 20.10 | 11.94 | 9.34 | 8.13 | 7.47 |
| 8.00% | 20.21 | 12.06 | 9.48 | 8.28 | 7.63 |
| 8.25% | 20.33 | 12.19 | 9.62 | 8.43 | 7.79 |
| 8.50% | 20.45 | 12.32 | 9.76 | 8.59 | 7.95 |
| 8.75% | 20.56 | 12.45 | 9.90 | 8.74 | 8.12 |
| 9.00% | 20.68 | 12.58 | 10.05 | 8.89 | 8.28 |
| 9.25% | 20.80 | 12.71 | 10.19 | 9.05 | 8.44 |
| 9.50% | 20.91 | 12.84 | 10.33 | 9.20 | 8.61 |
| 9.75% | 21.03 | 12.97 | 10.48 | 9.36 | 8.78 |
| 10.00% | 21.15 | 13.10 | 10.62 | 9.52 | 8.94 |
| 10.25% | 21.27 | 13.24 | 10.77 | 9.68 | 9.11 |
| 10.50% | 21.38 | 13.37 | 10.92 | 9.84 | 9.28 |
| 10.75% | 21.50 | 13.50 | 11.06 | 9.99 | 9.45 |
| 11.00% | 21.62 | 13.64 | 11.21 | 10.16 | 9.63 |
| 11.25% | 21.74 | 13.77 | 11.36 | 10.32 | 9.80 |
| 11.50% | 21.86 | 13.91 | 11.51 | 10.48 | 9.97 |
| 11.75% | 21.98 | 14.04 | 11.66 | 10.65 | 10.14 |
| 12.00% | 22.10 | 14.18 | 11.82 | 10.81 | 10.32 |
| 12.25% | 22.22 | 14.32 | 11.97 | 10.98 | 10.49 |
| 12.50% | 22.34 | 14.46 | 12.12 | 11.14 | 10.67 |
| 12.75% | 22.46 | 14.59 | 12.28 | 11.31 | 10.85 |
| 13.00% | 22.58 | 14.73 | 12.43 | 11.48 | 11.02 |
| 13.25% | 22.70 | 14.87 | 12.59 | 11.64 | 11.20 |
| 13.50% | 22.82 | 15.01 | 12.74 | 11.81 | 11.38 |
| 13.75% | 22.94 | 15.15 | 12.90 | 11.98 | 11.56 |
| 14.00% | 23.07 | 15.29 | 13.06 | 12.15 | 11.74 |
| 14.25% | 23.19 | 15.43 | 13.21 | 12.32 | 11.92 |
| 14.50% | 23.31 | 15.58 | 13.37 | 12.49 | 12.10 |
| 14.75% | 23.43 | 15.72 | 13.53 | 12.67 | 12.28 |
| 15.00% | 23.56 | 15.86 | 13.69 | 12.84 | 12.46 |
| 15.25% | 23.68 | 16.00 | 13.85 | 13.01 | 12.64 |
| 15.50% | 23.80 | 16.15 | 14.01 | 13.18 | 12.83 |
| 15.75% | 23.92 | 16.29 | 14.17 | 13.36 | 13.01 |
| 16.00% | 24.05 | 16.44 | 14.33 | 13.53 | 13.19 |

*** Interest compounded semi-annually. Actual payment amount may differ slightly.**

## Table 7: Canadian Dollar-Based Rates

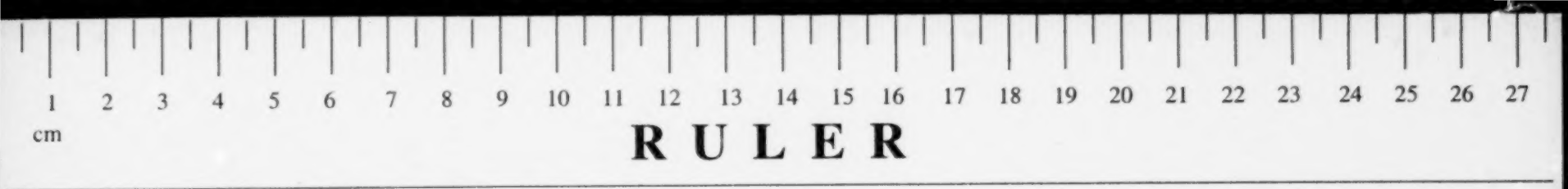
| Canadian Dollar Based Rates (CAN $) | | | |
|---|---|---|---|
| **Bank Buying Rate** | **Country** | **Currency** | **Bank Selling Rate** |
| 0.8580 | Australia | Dollar (A$) | 1.0244 |
| 0.0889 | Austria | Schilling | 0.1226 |
| 0.0318 | Belgium | Franc (BF) | 0.0398 |
| 0.1759 | Denmark | Krone (DKr) | 0.2131 |
| 2.2597 | England | Pound | 2.4513 |
| 1.4441 | Euro | Euro | 1.4870 |
| 0.2131 | Finland | Mark | 0.2743 |
| 0.2008 | France | Franc (FF) | 0.2384 |
| 0.6954 | Germany | Mark | 0.7845 |
| 0.003576 | Greece | Drachma | 0.005124 |
| 0.1643 | Hong Kong | Dollar ($HK) | 0.2032 |
| 0.000670 | Italy | Lire | 0.000821 |
| 0.01276 | Japan | Yen | 0.01480 |
| 0.1271 | Mexico | Peso | 0.1855 |
| 0.6079 | Netherlands | Guilder | 0.7062 |
| 0.6727 | New Zealand | Dollar ($NZ) | 0.8082 |
| 2.2597 | N. Ireland | Pound | 2.4887 |
| 0.1640 | Norway | Krone (NKr) | 0.1968 |
| 0.00654 | Portugal | Escudo | 0.00804 |
| 2.2597 | Scotland | Pound | 2.4958 |
| 0.7322 | Singapore | Dollar (S $) | 0.9792 |
| 1.6951 | S. Ireland | Punt | 1.9977 |
| 0.00792 | Spain | Peseta | 0.00957 |
| 0.1534 | Sweden | Krone (SKr) | 0.1843 |
| 0.8177 | Switzerland | Franc (SwF) | 0.9666 |
| 1.4215 | United States | Dollar (US $) | 1.4600 |

Friday, January 21, 2000

## Table 8: Customs Duties and Foreign Exchange

| | Group | Custom Duties | Excise Taxes |
|---|---|---|---|
| Costume Jewellery | NAFTA[1] | 0% | 10% > $3.00 per item |
| | MFN[2] | 8.5% | 10% > $3.00 per item |
| | GP[3] | 0% | 0% |
| Tablecloth (flax) | NAFTA | 0% | 0% |
| | MFN | 10% | 0% |
| | GP | 0% | 0% |
| Wristwatches | NAFTA | 0% | 10% > $50.00 per item |
| | MFN | 5% | 10% > $50.00 per item |
| | GP | 4% | 10% > $50.00 per item |
| Precious Jewellery | NAFTA | 0% | 10% |
| | MFN | 5.5% | 10% |
| | GP | 4% | 10% |
| Foot Gear | NAFTA | 0% | 0% |
| | MFN | 20% | 0% |
| Plastic Trays | NAFTA | 0% | 0% |
| | MFN | 10.5% | 0% |
| | GP | 6% | 0% |
| Jeans | NAFTA | 0% | 0% |
| | MFN | 20% | 0% |
| | GP | None | 0% |
| Metal Bed | NAFTA | 0% | 0% |
| | MFN | 8% | 0% |
| | GP | 5% | 0% |
| House Paint | NAFTA | 0% | 0% |
| | MFN | 6.5% | 0% |
| | GP | 3% | 0% |
| Cars | NAFTA | 0% | $100.00 for air conditioning |
| | MFN | 6.7% | $100.00 for air conditioning |
| | GP | 6% | $100.00 for air conditioning |

1 Trade agreement for "duty free" goods from U.S.A. and Mexico
2 Most Favoured Nation includes most countries not listed under NAFTA and GP
3 General Preferential status entitles China, India and many Latin American countries special lower rates for customs duties.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
cm
RULER

# Senior 4 Consumer Mathematics (40S)
# Standards Test

## Written Test Marking Guide

## January 2003

Manitoba
Education
and Youth

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Assessment and Evaluation Branch,
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## Marking Guidelines

The marking guide for the Written Test for the Senior 4 Consumer Mathematics (40S) Standards Test is based on the outcomes and standards found in the *Senior 4 Mathematics: Outcomes and Standards* document (2001).

The marking guide is designed to assess a wide range of student performance. Specific mark allocations for each step in a given test item are provided to distinguish levels of student performance and to offer consistency in scoring student responses.

The marking guide also illustrates two types of general marking procedures related to student conceptual errors and student arithmetical errors. These recommended procedures are indicated by the following text boxes:

**DEDUCTION TO TOTAL SCORE:**

Deduct ½ mark for transposition of a number or minor error that follows through to the solution of a task.

**MARKING CAP:**

Students earn a maximum of ½ the total value of the test item for using a correct strategy with incorrect values from a table or chart or using values from an incorrect table or chart.

Marking guides are never able to fully anticipate the variety of possible student responses. The *Senior 4 Consumer Mathematics Written Test Marking Guide* provides a variety of strategies most commonly used by students during pilot testing and when solving similar mathematics-related tasks.

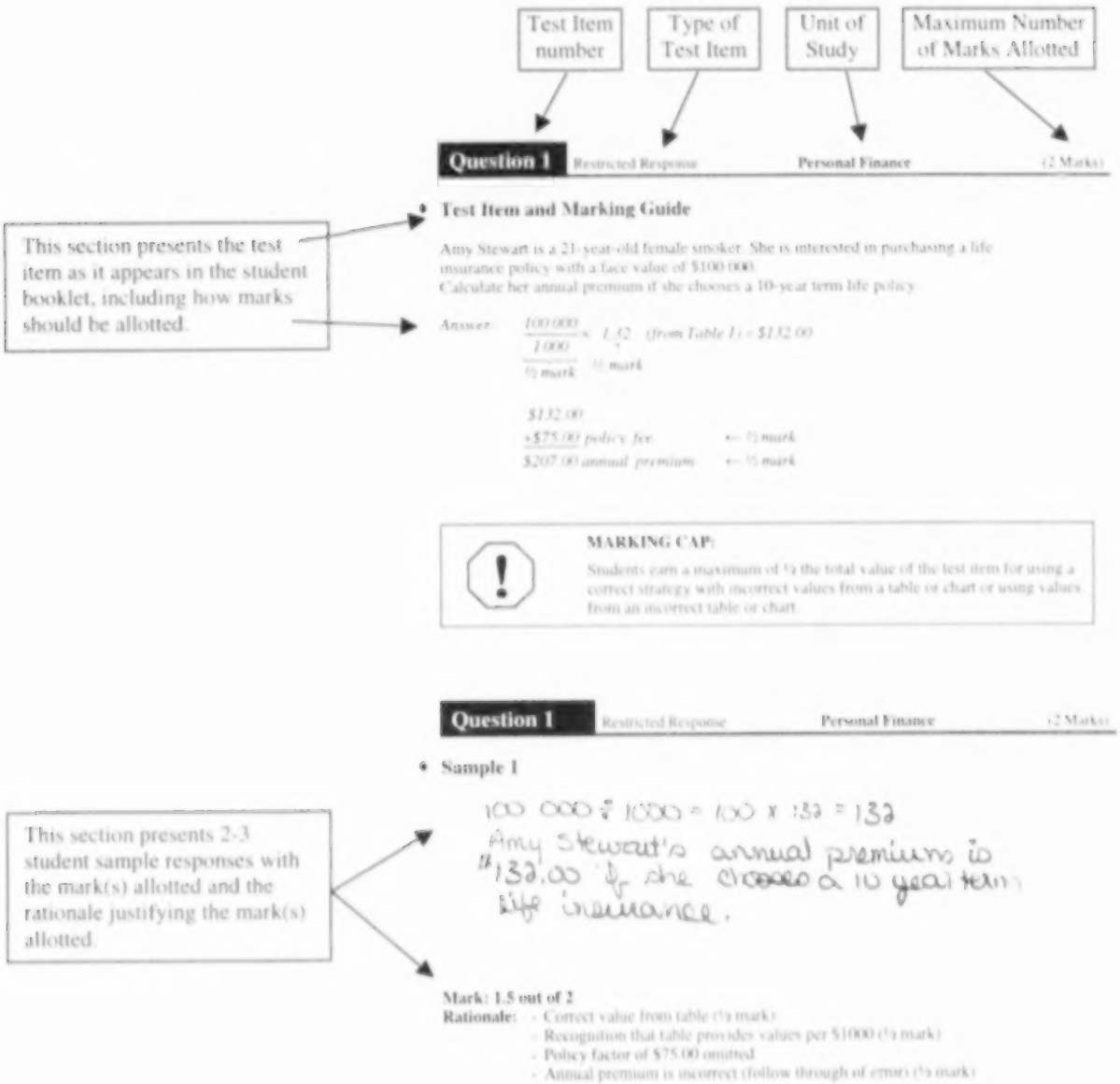
For each sample test item, a marking guide and student samples with scores and rationales are provided to help focus and clarify the marking criteria. Student responses are presented in order of increasing levels of performance.

### The recommended procedure for scoring student responses is as follows:

1. Read the *Written Test Marking Guide*.
2. Study the student samples provided and the rationales for the allotted scores.
3. Determine the mark for the student's response by comparing its features with the *Written Test Marking Guide* descriptions. The descriptions and samples only typify a student's response to a given question; an exact match is not anticipated.

## Presentation of the Student Samples

Each constructed-response question is presented using the following sections:


Test Item number
Type of Test Item
Unit of Study
Maximum Number of Marks Allotted
Question 1 Restricted Response Personal Finance (2 Marks)
This section presents the test item as it appears in the student booklet, including how marks should be allotted.
Test Item and Marking Guide
Amy Stewart is a 21-year-old female smoker. She is interested in purchasing a life insurance policy with a face value of $100 000.
Calculate her annual premium if she chooses a 10-year term life policy.
Answer
100 000 / 1000 × 1.32 (from Table 1) = $132.00
½ mark ½ mark
$132.00
+$75.00 policy fee ← ½ mark
$207.00 annual premium ← ½ mark
MARKING CAP:
Students earn a maximum of ½ the total value of the test item for using a correct strategy with incorrect values from a table or chart or using values from an incorrect table or chart.
Question 1 Restricted Response Personal Finance (2 Marks)
Sample 1
100 000 ÷ 1000 = 100 x 132 = 132
Amy Stewart's annual premium is $132.00 for a 10 year term life insurance.
This section presents 2-3 student sample responses with the mark(s) allotted and the rationale justifying the mark(s) allotted.
Mark: 1.5 out of 2
Rationale:
- Correct value from table (½ mark)
- Recognition that table provides values per $1000 (½ mark)
- Policy factor of $75.00 omitted
- Annual premium is incorrect (follow through of error) (½ mark)

## Question 1 Restricted Response **Personal Finance** (2 Marks)

### ♦ Test Item and Marking Guide

Amy Stewart is a 21-year-old female smoker. She is interested in purchasing a life insurance policy with a face value of $100 000.
Calculate her annual premium if she chooses a 10-year term life policy.

*Answer:* $\underbrace{\frac{100\,000}{1\,000}}_{\text{½ mark}} \times \underbrace{1.32}_{\text{½ mark}}$ *(from Table 1)* $= \$132.00$

*$132.00*
*+$75.00 policy fee* ← ½ mark
*$207.00 annual premium* ← ½ mark

**MARKING CAP:**

Students earn a maximum of ½ the total value of the test item for using a correct strategy with incorrect values from a table or chart or using values from an incorrect table or chart.

## Question 1 Restricted Response **Personal Finance** (2 Marks)

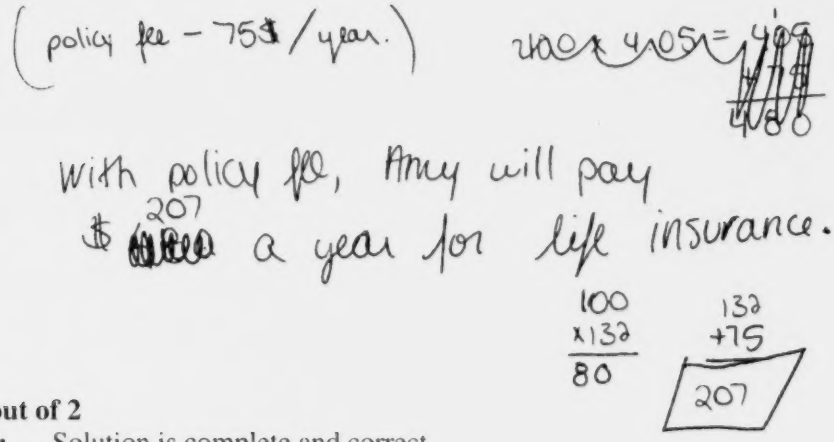
### ♦ Sample 1

100 000 ÷ 1000 = 100 x 132 = 132
Amy Stewart's annual premium is $132.00 if she chooses a 10 year term life insurance.

**Mark: 1.5 out of 2**
**Rationale:**
- Correct value from table (½ mark)
- Recognition that table provides values per $1000 (½ mark)
- Policy factor of $75.00 omitted
- Annual premium is incorrect (follow through of error) (½ mark)

## Question 1 Restricted Response **Personal Finance** (2 Marks)

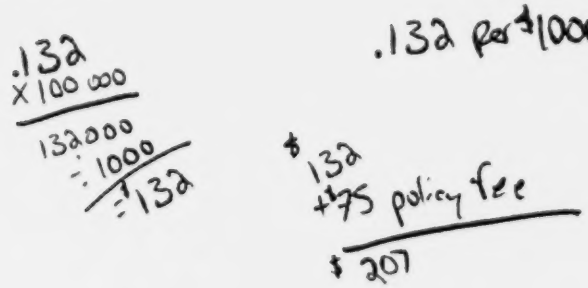
- **Sample 2**




**Mark: 2 out of 2**
**Rationale:** - Solution is complete and correct
- Quotient of 100 is awarded half mark as a result of division ($100 000 ÷ $1 000)

## Question 1 Restricted Response **Personal Finance** (2 Marks)

- **Sample 3**




**Mark: 2 out of 2**
**Rationale:** - Solution is complete and correct, no errors and/or omissions

## Question 2 Restricted Response **Personal Finance** (2 Marks)

### ◆ Test Item and Marking Guide

Marcel lives in a large apartment building. He would like to insure the contents of his suite for $45 000.
Calculate his premium for the year if he selects a standard policy with $200.00 deductible.

*Answer:* *$235.00* *from Table 4* ← *½ mark*
*×10%* *200.00 deductible* ← *½ mark*
*$23.50*

*$235.00 + $23.50 = $258.50 annual premium*
↑ ↑
*½ mark* *½ mark*

**MARKING CAP:**

Students earn a maximum of ½ the total value of the test item for using a correct strategy with incorrect values from a table or chart or using values from an incorrect table or chart.

## Question 2 Restricted Response **Personal Finance** (2 Marks)

### ◆ Sample 1

50 000 → 161
161 × 0.10 = 16.1
$177.10

**Mark: 1 out of 2**
**Rationale:** - Marking cap in effect (maximum one mark)
- Complete and correct, based on wrong table value (used homeowner's insurance rates)

**Question 2** Restricted Response **Personal Finance** (2 Marks)

- **Sample 2**

235,00 × 45000 ÷ 1000

=

10575 × 1.10 = 11632

for 200 deductible

**Mark: 1 out of 2**

**Rationale:**
- Correct value from Table 4 (½ mark)
- Recognition of $200.00 deductible (½ mark)
- Incorrect calculations and answer

**Question 2** Restricted Response **Personal Finance** (2 Marks)

- **Sample 3**

standard $235,00

× 1.1

Total premium $258,50

**Mark: 2 out of 2**

**Rationale:**
- Correct value from Table 4 (½ mark)
- Recognition of 10% premium increase (½ mark)
- Correct annual premium (½ mark × 2)

## Question 3 Open Response **Personal Finance** (1 Mark)

- **Test Item and Marking Guide**

Explain why you pay less interest in the second month of a mortgage than in the first month.

*Answer:* *As the payments progress, you pay less interest and more principal (the payment value remains the same).*
- *You pay less interest since you are paying more principal.*
- *You have more principal paid and less interest to pay later.*
- *You owe less money over time so you pay less interest.*

## Question 3 Open Response **Personal Finance** (1 Mark)

- **Sample 1**

Because of the tax

**Mark: 0 out of 1**
**Rationale:** - Incorrect and vague response

## Question 3 Open Response **Personal Finance** (1 Mark)

- **Sample 2**

You pay less interest in the second month than in the first month because the principal owing has gone down.

**Mark: 1 out of 1**
**Rationale:** - Correct response

## Question 4 Open Response **Personal Finance** (2 Marks)

### ♦ Test Item and Marking Guide

Jacob Whitehold is a 20-year-old male who plays extreme sports and is purchasing a $100 000 life insurance policy. Use the life insurance tables and your knowledge of term and whole life insurance policies to complete the chart:

| | ADVANTAGES FOR JACOB | DISADVANTAGES FOR JACOB |
|---|---|---|
| Term Life | | |
| Whole Life | | |

*Answer:*

| | *ADVANTAGES FOR JACOB* | *DISADVANTAGES FOR JACOB* |
|---|---|---|
| *Term Life* | • *cheaper in short term* | • *premiums increase over time*<br>• *more expensive long term*<br>• *no cash surrender value* |
| *Whole Life* | • *fixed premium over time*<br>• *cheaper long term*<br>• *cash surrender value* | • *more expensive in the short term* |

*½ mark per point to a maximum of 2 marks*

## Question 4 Open Response **Personal Finance** (2 Marks)

- **Sample 1**

| | ADVANTAGES FOR JACOB | DISADVANTAGES FOR JACOB |
|---|---|---|
| Term Life | you can change the amount of insurance at the end of the term | - it must be renued at the end of its term. |
| Whole Life | Once you purchase the insurance you will have it for the rest of your life. | Once your purchase it you must pay for it for the rest of your life. |

**Mark: 1.5 out of 2**

**Rationale:** - Advantages accurate (½ mark × 2)
- Disadvantage for term life accurate (½ mark)
- Misunderstanding of whole life premium duration

## Question 4 Open Response **Personal Finance** (2 Marks)

- **Sample 2** -assume non-smoker

| | ADVANTAGES FOR JACOB | DISADVANTAGES FOR JACOB |
|---|---|---|
| Term Life | -lower issue rate<br>-less expensive<br>-less commitment required | -less coverage<br>-less reliable<br>-shorter term |
| Whole Life | -more coverage<br>-more reliable<br>-longer term | -higher issue rate<br>-more expensive<br>-more commitment required |

**Mark: 2 out of 2**

**Rationale:** - Advantages for Jacob accurate (½ mark × 2)
- Disadvantages for Jacob accurate (½ mark × 2)

## Question 5 Restricted Response **Government Finances** (2.5 Marks)

### ♦ Test Item and Marking Guide

Danielle's brother purchases an old dresser at an auction. In one of the drawers he finds a box with foreign currency. There are 2 500 yen and 50 Hong Kong dollars.
What is the total value of the money in Canadian funds?

*Answer:* $2\,500 \text{ yen} \times 0.01276 = \$31.90$

↑ ½ mark ↑ ½ mark

$50 \text{ Hong Kong dollars} \times 0.1643 = \$8.22$

↑ ½ mark ↑ ½ mark

$\$31.90 + \$8.22 = \$40.12$

↑ ½ mark

**MARKING CAP:**

Students earn a maximum of 1.5 for using a correct strategy with incorrect values from a table or chart or using values from an incorrect table or chart.

## Question 5 Restricted Response **Government Finances** (2.5 Marks)

### ♦ Sample 1

2500 ÷ 0.01276 = 195 924.76

50 ÷ 0.1643 = 304.32

**Mark: 1 out of 2.5**

**Rationale:** - Correct values from Table 7 (½ mark × 2)
- Calculation incorrect

**Question 5** Restricted Response **Government Finances** (2.5 Marks)

- **Sample 2**

2500 X 0.01271 = 31.78
50 X 0.1643 = 8.22
31.78 + 8.22 = $40.00 in total

**Mark: 1.5 out of 2.5**
**Rationale:** - Marking cap in effect (maximum 1.5 marks)
- Incorrect value from Table 7 (yen)

**Question 5** Restricted Response **Government Finances** (2.5 Marks)

- **Sample 3**

2500 yen X 0.01276 = $31.90
50 (HK) x 0.1643 = $8.22
31.90 + 8.22 = $40.12

**Mark: 2.5 out of 2.5**
**Rationale:** - Solution is complete and correct

## Question 6 Restricted Response **Government Finances** (1 Mark)

- **Test Item and Marking Guide**

The Dominiski family is considering a move to a rural town in southeastern Manitoba.
They are unsure of the town's mill rate.
Calculate the mill rate, based on the following information:
Town budget: $10 250 000.00
Total Portioned Assessed Value: $450 000 000.00

*Answer:* $\underbrace{\frac{\$10\,250\,000.00}{\$450\,000\,000.00} \times 1\,000}_{\text{½ mark}} = 22.78\,(\text{or } 22.8)\,\text{mills}$ ← *½ mark*

*(from resource package)*

## Question 6 Restricted Response **Government Finances** (1 Mark)

- **Sample 1**

10 250 000.00 ÷ 450 000 000.00 = .02277

**Mark: 0 out of 1**
**Rationale:** - Incomplete formula

## Question 6 Restricted Response **Government Finances** (1 Mark)

- **Sample 2**

$\frac{10\,250,000}{450,000,000}$ X 1000 =

**Mark: 0.5 out of 1**
**Rationale:** - Correct substitution into formula based on resource package (½ mark)
- Incomplete calculation

## Question 7 Restricted Response **Government Finances** (1.5 Marks)

### ♦ Test Item and Marking Guide

The current assessed value of a home is $145 000 and the land is $25 000.
Calculate the total current portioned assessment when the portioned rate of assessment is 45 percent.

*Answer:*

$145\,000 \times 45\% = \$65\,250.00$
$25\,000 \times 45\% = \$11\,250.00$ } *(for × 45%)* ← ½ mark

$\$65\,250.00 + \$11\,250.00 = \$76\,500.00$ ← ½ mark

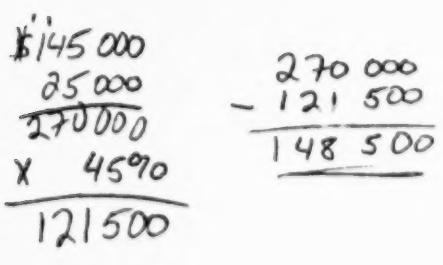
*OR*

*(for home and land values)* ← ½ mark

$(\underbrace{\$145\,000 + \$25\,000}_{\text{½ mark}}) \times \underset{\text{½ mark}}{45\%} = \underset{\text{½ mark}}{\$76\,500.00}$ ← 1½ mark

## Question 7 Restricted Response **Government Finances** (1.5 Marks)

### ♦ Sample 1




**Mark: 1 out of 1.5**

**Rationale:**
- Deduction to total score for minor error $270 000 (follows through to solution of 121 500)
- Recognition of 45% portioned rate of assessment (½ mark)
- Recognition of need to add $145 000 and $25 000 (½ mark)

## Question 7 Restricted Response **Government Finances** (1.5 Marks)

- **Sample 2**

145000+25000 x .45 = 156250

**Mark: 1 out of 1.5**
**Rationale:** - Recognition of need to add $145 000 and $25 000 (½ mark)
- Recognition of 45% portioned rate of assessment (½ mark)

## Question 7 Restricted Response **Government Finances** (1.5 Marks)

- **Sample 3**

150 000 x 0.45 = $67 500
30 000 x 0.45 = $13 500
67 500 + 13 500 = $81 000

**Mark: 1 out of 1.5**
**Rationale:** - Recognition of need to add value of home and land (½ mark)
- Recognition of 45% portioned rate of assessment (½ mark)
- Deduction to total score for minor error (incorrect rounding)

## Question 8 Extended Restricted Response **Government Finances** (3 Marks)

### ♦ Test Item and Marking Guide

A gas station advertises regular gasoline at 70.9 cents per litre. Jonathan purchases 40 litres of gasoline at the regular price. There is a 3.5 cent per litre discount at the pump.

A) Calculate the amount of gasoline tax that Jonathan pays.

*Answer:* $\underbrace{40 \times .115}_{\text{½ mark}} = \underset{\text{½ mark}}{\$4.60}$ ← *1 mark*

B) Calculate the total cost of Jonathan's gas purchase **without** the discount.

*Answer:* $\underbrace{40 \times .709}_{\text{½ mark}} = \underset{\text{½ mark}}{\$28.36}$ ← *1 mark*

C) Calculate the total cost of Jonathan's gas purchase **with** the discount.

*Answer:* $40 \times (70.9 - 3.5)$

$\underbrace{40 \times (67.4)}_{\text{½ mark}} = \underset{\text{½ mark}}{\$26.96}$ OR $40 \times .035 = \$1.40$, $\$28.36 - \$1.40 = \$26.96$ ← *1 mark*

## Question 8 Extended Restricted Response **Government Finances** (3 Marks)

- **Sample 1**

A) Calculate the amount of gasoline tax that Jonathan pays.

28.36 − 26.96 = 1.4

X.07
.07
.098
+ .098
$1.60

B) Calculate the total cost of Jonathan's gas purchase **without** the discount.

40 x 70.9 = 28.36

C) Calculate the total cost of Jonathan's gas purchase **with** the discount.

70.9 − 3.5 = 67.4 x 40 = 26.96

**Mark: 2 out of 3**
**Rationale:** - Incorrect response for Part A
- Accurate calculation for Part B (1 mark)
- Accurate calculation for Part C (1 mark)

## ♦ Sample 2

A) Calculate the amount of gasoline tax that Jonathan pays.

40 x .115 = 4.6

B) Calculate the total cost of Jonathan's gas purchase **without** the discount.

40 x .709 = 28.36

C) Calculate the total cost of Jonathan's gas purchase **with** the discount.

.035 x 40 = 1.40

1.40 - 28.36 = 26.96

**Mark: 3 out of 3**

**Rationale:**
- Accurate calculation for Part A (1 mark)
- Accurate calculation for Part B (1 mark)
- Accurate calculation for Part C (1 mark)

## Question 9 Extended Restricted Response **Statistics** (4 Marks)

### ♦ Test Item and Marking Guide

The average precipitation for the city of Brandon (to the nearest mm) for the months of the year from 1969 to 1990 was as follows:

| Month | Average Monthly Precipitation (mm) |
|---|---|
| January | 21 |
| February | 19 |
| March | 23 |
| April | 38 |
| May | 49 |
| June | 75 |
| July | 72 |
| August | 71 |
| September | 51 |
| October | 24 |
| November | 16 |
| December | 21 |

A) Calculate the mean of the data.

*Answer:* $\bar{x} = 480 \div 12$ ← ½ *mark*

$\bar{x} = 40$ ← ½ *mark*

B) Calculate the range of the data.

*Answer:* $75 - 16 = 59$ ← ½ *mark*

*(continued on next page)*

C) Calculate the standard deviation of the data using the following table:

| Precipitation ($x$) | Difference from Mean ($x - \bar{x}$) | Square of Difference $(x - \bar{x})^2$ |
|---|---|---|
| 21 | *-19* | *361* |
| 19 | *-21* | *441* |
| 23 | *-17* | *289* |
| 38 | *-2* | *4* |
| 49 | *9* | *81* |
| 75 | *35* | *1 225* |
| 72 | *32* | *1 024* |
| 71 | *31* | *961* |
| 51 | *11* | *121* |
| 24 | *-16* | *256* |
| 16 | *-24* | *576* |
| 21 | *-19* | *361* |
| TOTAL | *Sum* 0 | *Sum* 5 700 |

← ½ mark

↑
½ mark

*Answer:* $S = \sqrt{\frac{\Sigma(x-\bar{x})^2}{n-1}} = \underbrace{\sqrt{\frac{5\,700}{11}}}_{\substack{\text{(substitution)} \\ \text{½ mark}}} = \underset{\substack{\uparrow \\ \text{(solving)} \\ \text{½ mark}}}{\sqrt{518.2}} = \underset{\substack{\uparrow \\ \text{(solution)} \\ \text{½ mark}}}{22.8}$ ← 1½ marks

## ♦ Sample 1

The average precipitation for the city of Brandon (to the nearest mm) for the months of the year from 1969 to 1990 was as follows:

| Month | Average Monthly Precipitation (mm) |
|---|---|
| January | 21 |
| February | 19 |
| March | 23 |
| April | 38 |
| May | 49 |
| June | 75 |
| July | 72 |
| August | 71 |
| September | 51 |
| October | 24 |
| November | 16 |
| December | 21 |

A) Calculate the mean of the data.

75 − 16 = 59 is the mean of the data.

B) Calculate the range of the data.

21 + 19 + 23 + 38 + 49 + 75 + 72 + 71 + 51 + 24 + 16 + 21 = 480

480 ÷ 12 = 40 is the range of the data.

*(continued on next page)*

C) Calculate the standard deviation of the data using the following table:

| Precipitation ($x$) | Difference from Mean $(x-\bar{x})$ | Square of Difference $(x-\bar{x})^2$ |
|---|---|---|
| 21 | -19 | 361 |
| 19 | -21 | 441 |
| 23 | -17 | 289 |
| 38 | -2 | 4 |
| 49 | 9 | 81 |
| 75 | 35 | 1 225 |
| 72 | 32 | 1 024 |
| 71 | 31 | 961 |
| 51 | 11 | 121 |
| 24 | -16 | 256 |
| 16 | -24 | 576 |
| 21 | -19 | 361 |
| TOTAL | *Sum* 0 | *Sum* 5700 |

5700 ÷ 11 = 518.18

$\sqrt{518.18} = 22.76$

standard deviation is 22.76.

**Mark: 2.5 out of 4**

**Rationale:**
- Conceptual error in Part A
- Conceptual error in Part B
- Sums are correct in Part C (½ mark × 2)
- Accurate substitution, solving and solution in Part C (1½ marks)

## ♦ Sample 2

The average precipitation for the city of Brandon (to the nearest mm) for the months of the year from 1969 to 1990 was as follows:

| Month | Average Monthly Precipitation (mm) |
|---|---|
| January | 21 |
| February | 19 |
| March | 23 |
| April | 38 |
| May | 49 |
| June | 75 |
| July | 72 |
| August | 71 |
| September | 51 |
| October | 24 |
| November | 16 |
| December | 21 |

A) Calculate the mean of the data.

480 ÷ 12 = 40

B) Calculate the range of the data.

75 - 16 = 59

*(continued on next page)*

C) Calculate the standard deviation of the data using the following table:

| Precipitation ($x$) | Difference from Mean $(x-\bar{x})$ | Square of Difference $(x-\bar{x})^2$ |
|---|---|---|
| 21 | -19 | 361 |
| 19 | -21 | 441 |
| 23 | -17 | 289 |
| 38 | -2 | 4 |
| 49 | 9 | 81 |
| 75 | 35 | 1 225 |
| 72 | 32 | 1 024 |
| 71 | 31 | 961 |
| 51 | 11 | 121 |
| 24 | -16 | 256 |
| 16 | -24 | 576 |
| 21 | -19 | 361 |
| TOTAL | Sum 0 | Sum 5700 |

5,700 ÷ 11 = 518

$\sqrt{518}$ = 22.76

**Mark: 4 out of 4**

**Rationale:**
- Part A correct (½ mark)
- Part B correct (½ mark)
- Part B correct sums (½ mark)
- Part C standard deviation correct (1½ marks)

## Question 10 Restricted Response **Statistics** (2 Marks)

- **Test Item and Marking Guide**

Stan wants to study at a U.S. college after graduating. He has to be in the 75th percentile or higher on their entrance exam to be accepted. Fifty seven students wrote the entrance exam. Stan earned a score of 137 out of 175. Thirty-nine students scored lower than Stan. Three other students earned 137 out of 175.

A) Determine Stan's percentile ranking.

*Answer:* $\underbrace{\frac{39+.5(4)}{57}}_{\text{½ mark}} \times 100 = \frac{41}{57} \times 100 = \underbrace{72}_{\text{½ mark}} = P_{72}$

B) State whether Stan can be accepted with a score of 137 out of 175.

*Answer:* *No, he cannot be accepted* ← *½ mark*

## Question 10 Restricted Response **Statistics** (2 Marks)

- **Sample 1**

A) Determine Stan's percentile ranking.

$\frac{39+35}{57} \times 100 = 73.68$

B) State whether Stan can be accepted with a score of 137 out of 175.

137 # 175 = 78 yes he will be accepted.

**Mark: 0 out of 2**

**Rationale:**
- Incorrect E value in Part A
- Incorrect initial formula and substitution in Part A
- Incorrect response to Part B

## Question 10 Restricted Response **Statistics** (2 Marks)

- **Sample 2**

A) Determine Stan's percentile ranking.

$P = \left(\frac{B + 0.5E}{N}\right) \times 100 \quad P = \left(\frac{39 + 0.5 \times 3}{57}\right) \times 100$

$P = \frac{40.5}{57} \times 100 \quad P = 71\%$

B) State whether Stan can be accepted with a score of 137 out of 175.

He can't be accepted.

**Mark: 1.5 out of 2**
**Rationale:** - Minor calculation error in Part A
- Use of "%" in final solution of Part A considered a trivial error — no deduction

## Question 10 Restricted Response **Statistics** (2 Marks)

- **Sample 3**

A) Determine Stan's percentile ranking.

$P = \left(\frac{B + 0.5E}{n}\right) \times 100 \quad P = \left(\frac{39 + 2}{57}\right) \times 100$

$P = \left(\frac{39 + 0.5(4)}{57}\right) \times 100 \quad P = \left(\frac{41}{57}\right) \times 100 \quad P = 72$

$P = 0.72 \times 100$

B) State whether Stan can be accepted with a score of 137 out of 175.

Stan cannot be accepted because he only got 72 and he needs 75.

**Mark: 2 out of 2**
**Rationale:** - Accurate use of formula in Part A (1½ mark)
- Accurate response in Part B (½ mark)

## Question 11 Restricted Response **Design and Measurement** (4 Marks)

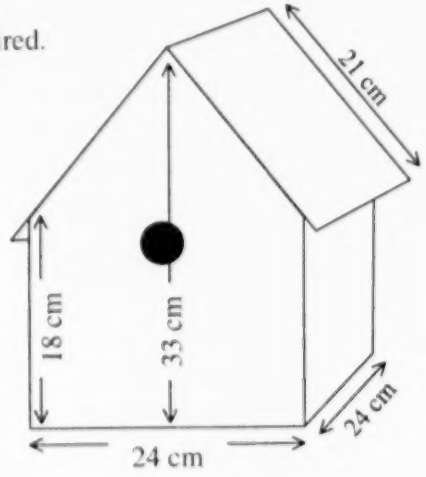
### ♦ Test Item and Marking Guide

Draw the constituent parts of the birdhouse shown below.

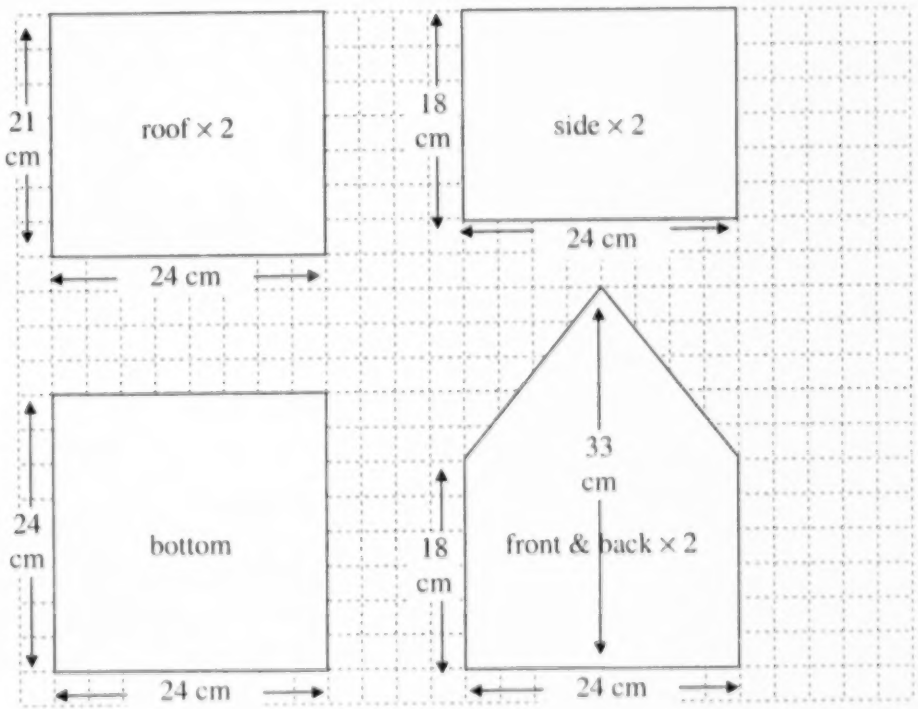
A) Indicate the actual dimensions of each constituent part.

B) Indicate how many of each constituent part is required. Use the graph paper provided.

(diagram not to scale)




*Answer:*

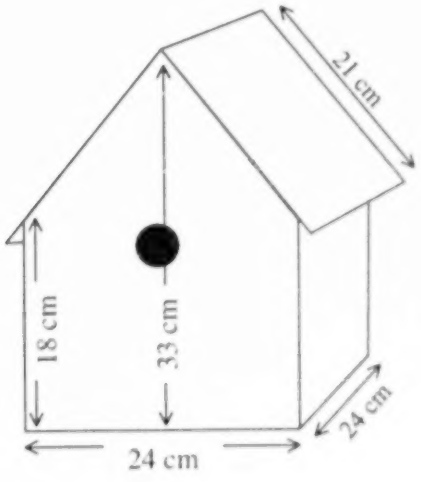


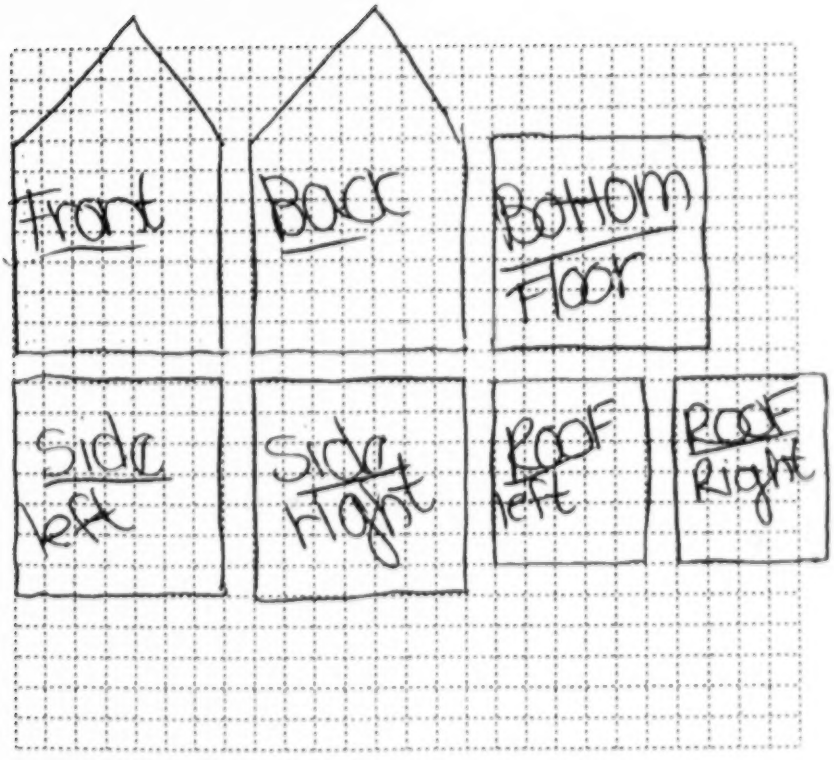

*correct measurements*
*½ mark × 4*

*constituent parts*
*½ mark × 4*

- **Sample 1**

(diagram not to scale)



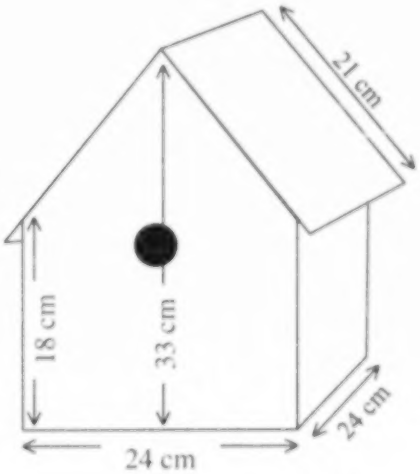




**Mark: 2 out of 4**

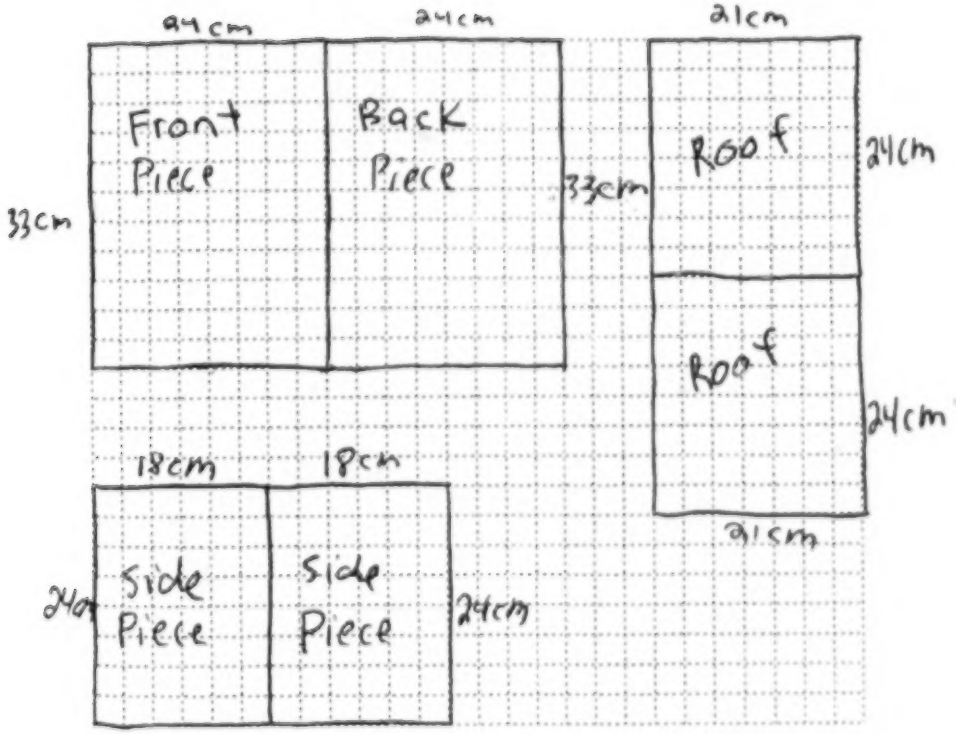
**Rationale:** - No dimensions indicated in Part A
- Correct number of constituent parts in Part B (4 × ½ mark)

- **Sample 2**

6 constituen parts are required




(diagram not to scale)

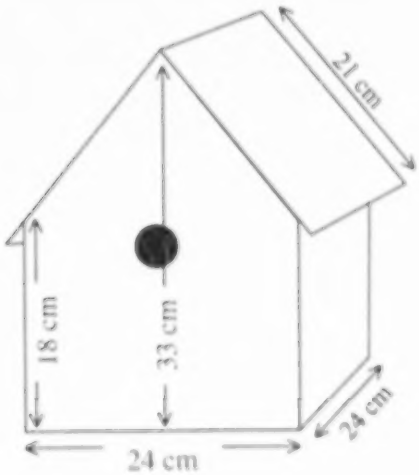


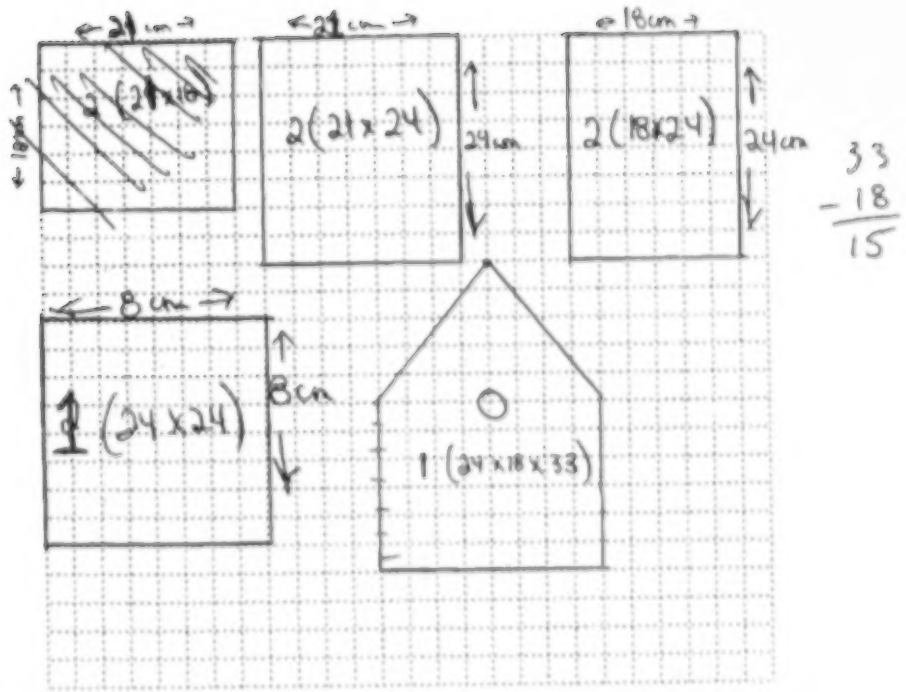

**Mark: 2 out of 4**

**Rationale:**
- Accurate dimensions for roof and sides in Part A (½ mark × 2)
- Constituent parts for roof and sides accurate in Part B (½ mark × 2)
- Front and back are wrong shape and wrong measurement
- Bottom is missing

- **Sample 3**

(diagram not to scale)



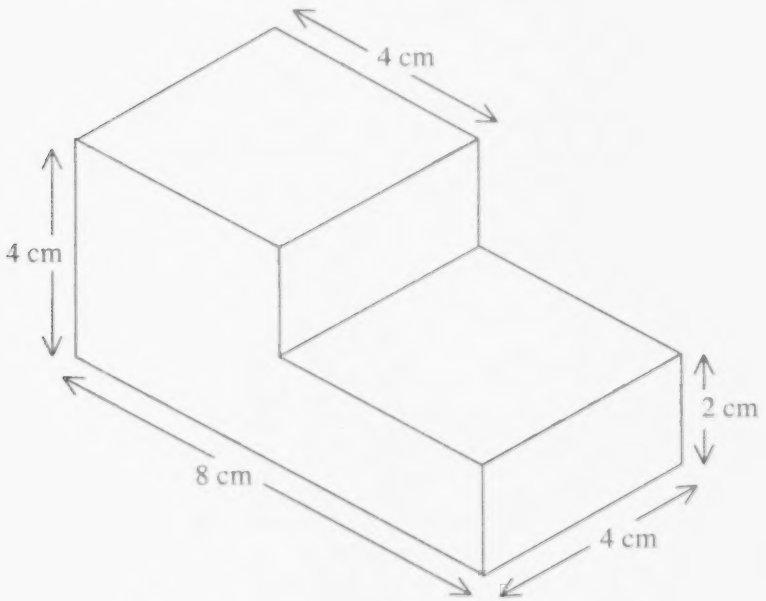

**Mark: 3.5 out of 4**

**Rationale:** - Dimensions accurate for constituent parts in Part A (4 × ½ mark)
- Accurate roof, bottom and sides in Part B (3 × ½ mark)
- Back is missing

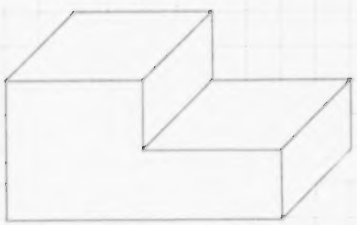
## Question 12 Restricted Response **Design and Measurement** (2 Marks)

### Test Item and Marking Guide

Draw an oblique projection of the object shown below.
Use the graph paper provided. State the scale used.




*Answer:*



Scale: 1 square = 1 cm

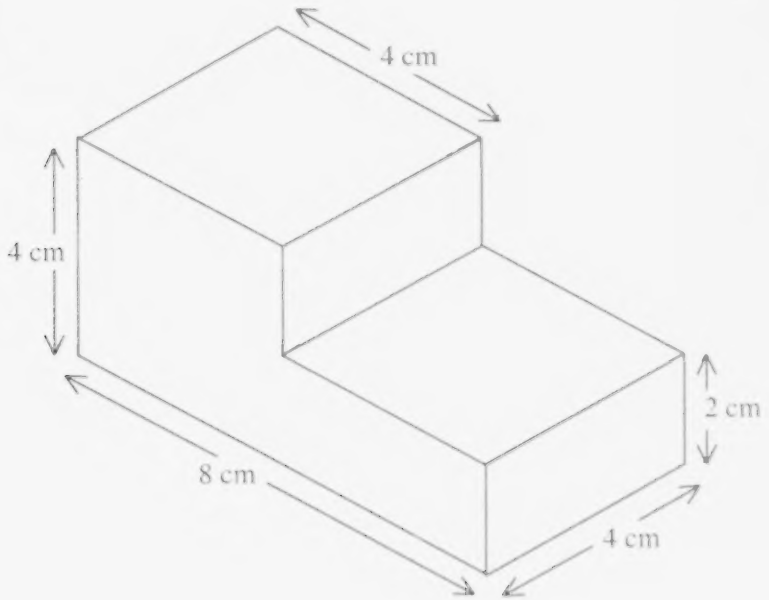
*correct scale* ← *1 mark*
*correct drawing and dimensions* ← *1 mark*

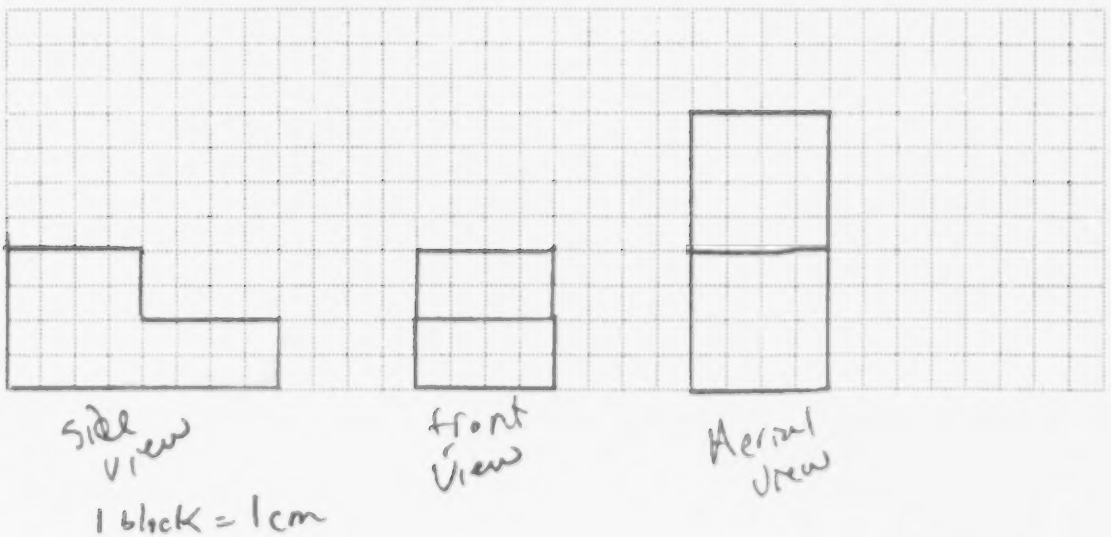
*(Orientation of projection may vary)*

## Question 12 Restricted Response **Design and Measurement** (2 Marks)

### ♦ Sample 1

Draw an oblique projection of the object shown below.
Use the graph paper provided. State the scale used.

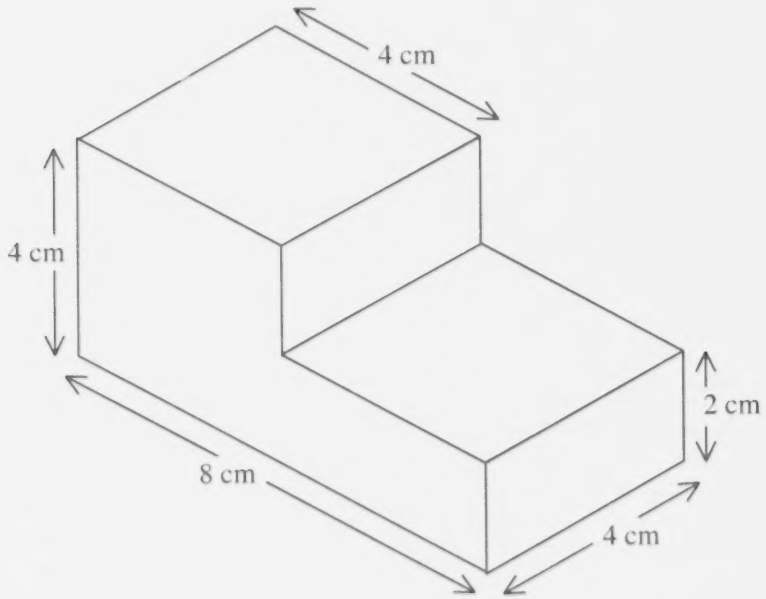


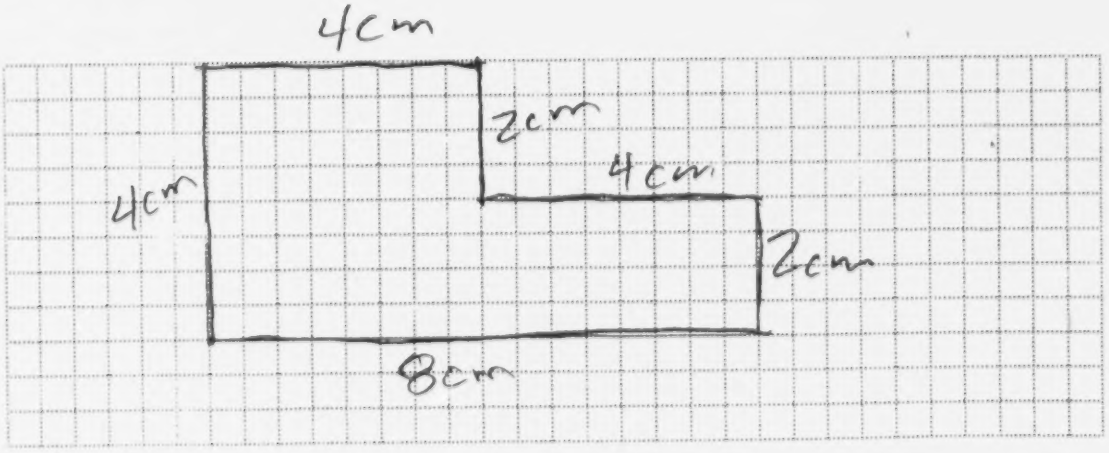




**Mark: 1 out of 2**
**Rationale:** - Scale stated (1 mark)
- Views are provided instead of oblique projection

## ♦ Sample 2

Draw an oblique projection of the object shown below.
Use the graph paper provided. State the scale used.



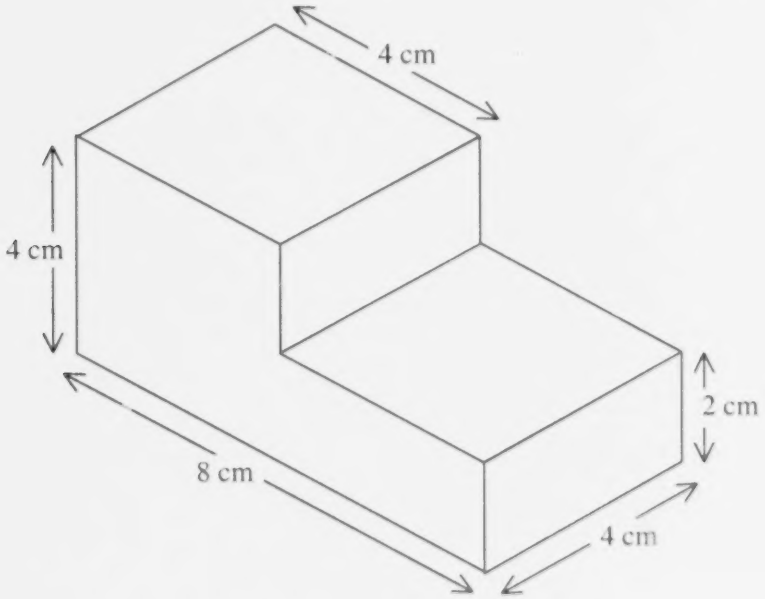



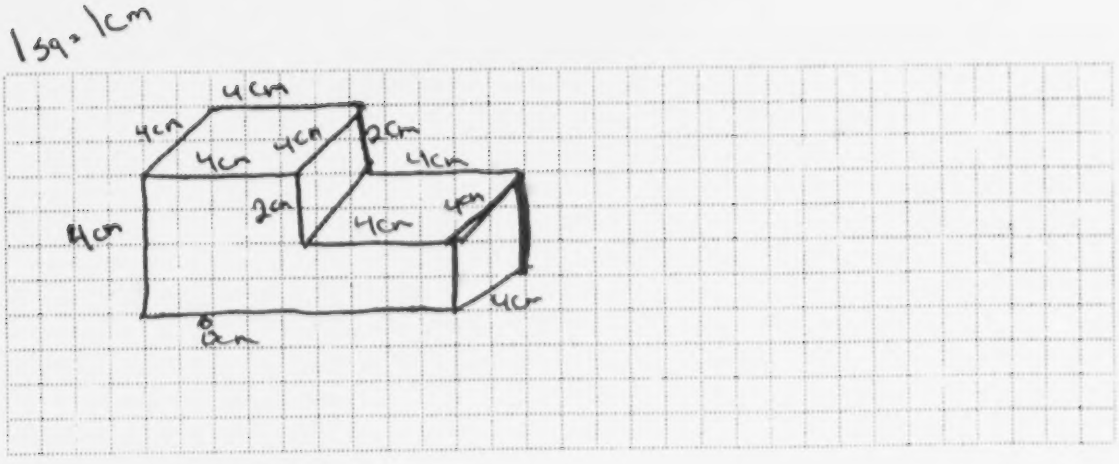

**Mark: 1 out of 2**

**Rationale:** - Scale is correct (made clear by indication of dimensions) for face view (1 mark)
- No depth provided (drawing and dimensions incorrect)

## ♦ Sample 3

Draw an oblique projection of the object shown below.
Use the graph paper provided. State the scale used.




**Mark: 2 out of 2**
**Rationale:** - Complete and correct (1 mark)
- Angle is poorly drawn, but concept of oblique is clear (1 mark)

## Question 13 Restricted Response — Variation and Formulas — (2 Marks)

### ♦ Test Item and Marking Guide

The approximate volume of a sphere varies directly as the cube of its radius.
The volume of a sphere with a radius of 3 cm is 108 $cm^3$.
Find the volume of water needed to fill a water balloon with a radius of 5 cm.

*Answer:*

$V = kr^3$ ← ½ mark

$108 = k3^3$

$108 = 27k$

$k = \frac{108}{27}$

$k = 4$ ← ½ mark

$V = 4r^3$

$= 4(5)^3$ ← ½ mark

$V = 500\ cm^3$ ← ½ mark

*or*

$\frac{108}{3^3} = \frac{x}{5^3}$

$\frac{108}{27} = \frac{x}{125}$

} 1½ marks

$x = 500\ cm^3$ ← ½ mark

*or*

$V = \frac{4}{3}\pi r^3$ ← ½ mark

$V = \frac{4}{3}(3.14)(5)^3$ ← ½ mark

$V = \frac{4}{3} 3.14 \times 125$

$V = 523.3 (using\ 3.14)$

} ← ½ mark

*or*

*523.6 (using pi)* ← ½ mark

## Question 13 Restricted Response — Variation and Formulas — (2 Marks)

### ♦ Sample 1

$\frac{108}{3^3} = \frac{x}{5^3}$

$\frac{108}{9} = \frac{x}{15}$

**Mark: 1 out of 2**
**Rationale:** - Correct formula
- Minor error (½ mark deduction)
- No solution

## Question 13 Restricted Response Variation and Formulas (2 Marks)

- **Sample 2**

$V = \frac{4}{3}\pi r^3$

$V = \frac{4}{3}(3.14)(5)^3$

$V = (20)^3$

$V = 60$

**Mark: 1 out of 2**

**Rationale:** - Correct formula, correct substitution (½ mark × 2)
- Order of operation incorrect

## Question 13 Restricted Response Variation and Formulas (2 Marks)

- **Sample 3**

$V = \frac{4}{3}\pi r^3$

$V = 1.\overline{3}\pi 5^3$

$V = 1.\overline{3}\pi 125$

$V = 523.6\ cm^3$

approximately $523.6\ cm^3$ of water is required to fill a balloon of 5cm radius.

**Mark: 2 out of 2**

**Rationale:** - Correct formula (½ mark)
- Correct substitution (½ mark × 2)
- Correct solution (½ mark)

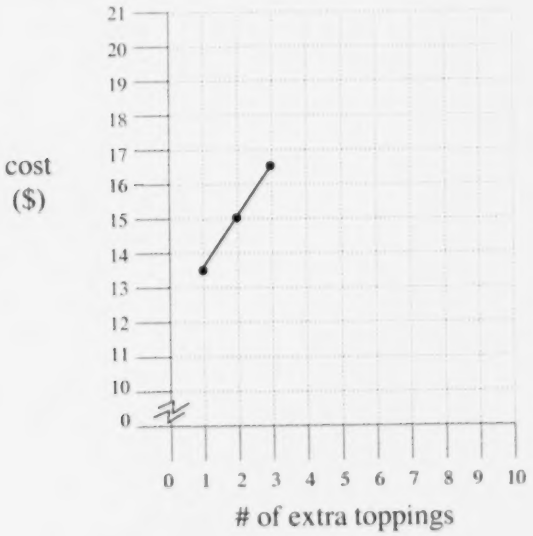
## Question 14 Extended Restricted Response **Variation and Formulas** (4 Marks)

### ♦ Test Item and Marking Guide

The menu at Pizza Palace shows the following costs:

A large tomato sauce cheese pizza with one extra topping costs $13.50. With two extra toppings, the cost is $15.00. With three extra toppings, the cost is $16.50.

A) Plot the cost versus the number of extra toppings on the graph.




← *1 mark*

B) Determine the cost per topping.

| # toppings | cost |
|---|---|
| 1 | $13.50 |
| 2 | $15.00 |
| 3 | $16.50 |

*Answer:* *$15.00 - $13.50 = $1.50 (or from the graph)* ← *1 mark*

C) Express this partial variation as an equation, substituting the pizza information.

*Answer:* *C = 12 + n(1.5)* ← *1 mark*

**DEDUCTION TO TOTAL SCORE:**

Students omitting the values in the equation earn a maximum of ½ mark.

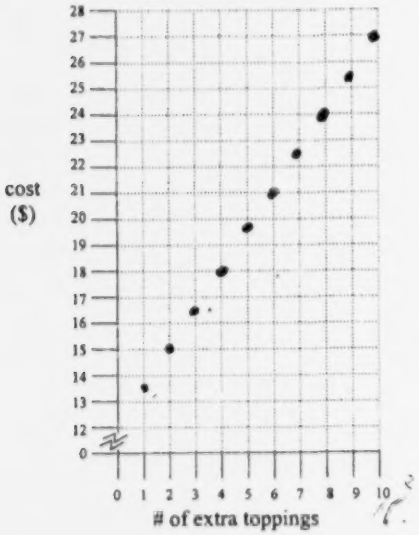
D) Determine the cost of a large pizza with no extra toppings.

*Answer:* *from the graph or $12.00 + 0 = $12.00* ← *1 mark*

## Question 14 Extended Restricted Response **Variation and Formulas** (4 Marks)

### ♦ Sample 1

A) Plot the cost versus the number of extra toppings on the graph.




B) Determine the cost per topping.

toppings - $1.50

C) Express this partial variation as an equation, substituting the pizza information.

D) Determine the cost of a large pizza with no extra toppings.

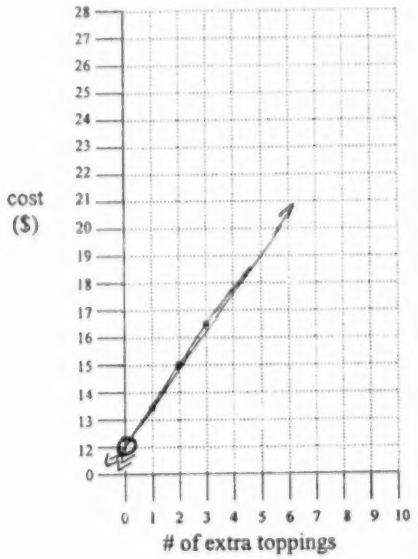
13.50 - 1.50 = 12.00
large pizza - no toppings = $12.00

**Mark: 3.5 out of 4**

**Rationale:**
- Accurate plotting of data on graph (1 mark)
- Accurate calculation Part B (1 mark)
- No response to Part C (½ mark)
- Accurate calculation for Part D (1 mark)

## ♦ Sample 2

A) Plot the cost versus the number of extra toppings on the graph.




B) Determine the cost per topping.

13.50 + 1.50 = 15.00
15.00 + 1.50 = 16.50
∴ each topping costs 1.50

C) Express this partial variation as an equation, substituting the pizza information.

C = F + Kn

D) Determine the cost of a large pizza with no extra toppings.

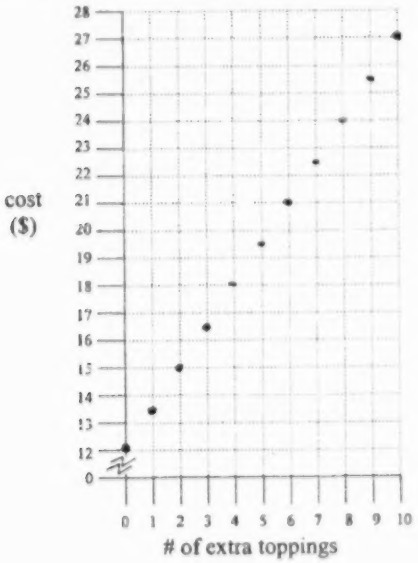
13.50 - 1.50 = 12.00 for no toppings

**Mark: 3 out of 4**

**Rationale:**
- Accurate plotting of data on graph (1 mark)
- Accurate calculation for Part B (1 mark)
- No substitution into equation in Part C
- Accurate calculation for Part D

## ♦ Sample 3

A) Plot the cost versus the number of extra toppings on the graph.




B) Determine the cost per topping.

1.5

C) Express this partial variation as an equation, substituting the pizza information.

n = # of topping

C = 12 + n(1.5)

D) Determine the cost of a large pizza with no extra toppings.

$12.00

**Mark: 4 out of 4**

**Rationale:**
- Accurate plotting of data on graph (1 mark)
- Accurate solution for Part B (1 mark)
- Accurate substitution into formula for Part C (1 mark)
- Accurate solution for Part D (1 mark)

## Question 15 Open Response **Investments** (2 Marks)

### ♦ Test Item and Marking Guide

List four different investment options.

*Answer:*
- *stocks*
- *bonds*
- *RSPs*
- *GICs*
- *bank accounts*
- *real estate*
- *collectibles*
- *other*

} *4 × ½ marks*

## Question 15 Open Response **Investments** (2 Marks)

### ♦ Sample 1

List four different investment options.

Stocks
Bonds
Mutual Funds

**Mark: 1.5 out of 2**
**Rationale:** - 3 investment options listed (.5 marks × 3)

## Question 15 Open Response **Investments** (2 Marks)

- **Sample 2**

List four different investment options.

- RRSPs
- savings loans
- bank accounts
- safes

**Mark: 1.5 out of 2**
**Rationale:** - 3 investment options listed (.5 marks × 3)
- fourth option is not considered an investment

## Question 15 Open Response **Investments** (2 Marks)

- **Sample 3**

List four different investment options.

real estate

old cars (antiques)

retirement plans

savings account

**Mark: 2 out of 2**
**Rationale:** - 4 different investment options listed

## Question 16 Open Response **Investments** (1 Mark)

### ♦ Test Item and Marking Guide

Explain the purpose of a Net Worth Statement.

*Answer:*
- *To provide a snapshot of your financial situation*
- *To provide lending institutions or investment advisors with a standard measure for assets and liabilities*

## Question 16 Open Response **Investments** (1 Mark)

### ♦ Sample 1

It determines how much money you would be covered for in case of accident.

**Mark: 0 out of 1**
**Rationale:** - misunderstanding of net worth

## Question 16 Open Response **Investments** (1 Mark)

### ♦ Sample 2

The Net worth is there so you can find the Total Liabilities

**Mark: 1 out of 1**
**Rationale:** - evidence of understanding of net worth measures (1 mark)

## Question 17 Extended Restricted Response **Investments** (2 Marks)

### ♦ Test Item and Marking Guide

Using the chart below:

A) State the name of the stock that costs the least to purchase.

*Answer: Cymbar* ← *½ mark*

B) Determine which stock dropped the most in dollar value from Wednesday, April 24 to Thursday, April 25.

*Answer: Croman* ← *½ mark*

C) State which stock did not change at all between Wednesday, April 24 and Thursday, April 25.

*Answer: Cydzil* ← *½ mark*

D) State the name of the stock represented by the symbol DMW.

*Answer: Dimwyl* ← *½ mark*

| Thursday, April 25, 2002 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 365-day | | stock | sym | div | high | low | close | chg | vol 100s | yld | p/e ratio |
| high | low | | | | | | | | | | |
| 11.40 | 4.25 | Crisimar | CRS | | 9.25 | 9.05 | 9.05 | -0.05 | 82 | | |
| 46.10 | 17.25 | Croman | CRM | | 23.13 | 20.71 | 22.62 | -0.48 | 1 103 | | 11.0 |
| 3.45 | 1.10 | Crysdan | CRS | | 2.74 | 2.60 | 2.64 | -0.11 | 970 | | |
| 1.65 | 0.66 | Cydzil | CDZ | | 1.60 | 1.59 | 1.60 | | 77 | | |
| 0.24 | 0.10 | Cymbar | CMB | | 0.13 | 0.13 | 0.13 | -.005 | 200 | | |
| 1.85 | 0.20 | Dimwyl | DMW | | 0.34 | 0.27 | 0.31 | +0.04 | 623 | | |
| 3.98 | 1.37 | Dorvin | DRV | | 3.50 | 3.37 | 3.45 | +0.05 | 315 | | 24.6 |
| 5.50 | 2.40 | Dupplex | DPX | | 4.10 | 3.75 | 3.75 | -0.19 | 1 063 | | |
| 11.75 | 4.10 | Dylvar | DLR | | 10.45 | 10.25 | 10.45 | +0.35 | 141 | | 31.7 |
| 79.00 | 40.25 | Dummler | DUM | | 71.71 | 71.71 | 71.71 | +1.71 | 2 | 2.9 | |

## Question 18 Restricted Response **Investments** (2 Marks)

### ♦ Test Item and Marking Guide

There are four characteristics of investments: liquidity, risk, inflation risk and yield.
Explain any 2 characteristics of investments.

*Answer:* *each characteristic ← 1 mark*

| | |
|---|---|
| *Liquidity* | *the ease with which an investment can be converted to cash* |
| *Risk* | *the possibility of losing all or part of your investment. Generally, the greater the risk, the higher the potential yield* |
| *Inflation risk* | *the possibility that invested funds will lose purchasing power* |
| *Yield* | *the return on an investment, expressed as a percentage* |

## Question 18 Restricted Response **Investments** (2 Marks)

### ♦ Sample 1

Liquidity is when you can get your money out of an investment easily.

Risk is when you put your money in stocks.

**Mark: 1 out of 2**
**Rationale:** - generally accurate description of liquidity (1 mark)
- vague description of risk does not define the term

- **Sample 2**

Yield – amount of money you earn by investing. It can be positive or negative.

Risk – the chance that your yield in an investment might be less than you expected.

**Mark: 2 out of 2**
**Rationale:** - evidence of understanding of yield (1 mark)
- evidence of general understanding of risk (1 mark)